

# Designing For Complex Systems



Vitaly Friedman, Tallinn, Estonia  
e-Governance Conference, May 11, 2022

Designing For Complex Systems

# Complexity



Thinking of systems

# Complex Environments

- 01** – Business Intelligence systems
- 02** – Configure Price Quote systems
- 03** – CRM applications
- 04** – Healthcare systems
- 05** – Accounting software
- 06** – Multi-step builders/configurators
- 07** – Banking/trading applications
- 08** – Information systems
- 09** – Public services
- 10** – Analytical/operational dashboards
- 11** – Higher Education
- 12** – Expert software
- 13** – Extract, Transform, Load tools
- 14** – Database query builders
- 15** – Data evaluation and filtering
- 16** – Modeling and visualization
- 17** – PIM software
- 18** – HR Management tools
- 19** – B2B and legacy systems
- 20** – Monitoring/analytics tools

Complexity

# Inherently Complex

Some digital products are *inherently complex* because of *deeply intricate environments* in which they operate. They are designed for *expert users* operating in a *knowledge domain*.

Default User

Brisbois Dental, PLLC

Perio Charting

Patient

Derek "Ed" Harvey

New exam

Use previous data

Provider

Wendy Craig

Exam Date

02/14/2021

Previous perio exams

1

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Tooth 3 - Buccal

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Suppuration

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Furcation

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Mobility

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2

3

Tooth notes

0

Exam settings

Legend

Switch to table view

Hide scores

Print exam

Add exam note

Finish exam

Buccal

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CEJ

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6

8

10

12

14

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1-X

2-E

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10-C

11-C

12-X

13-E-P

14-C

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16-X

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Derek "Ed" Harvey

Profile

Insurance

Claims

Billing

Recare

Education

Charting

Perio Charting

Appointments

Files and Letters

Correspondence

Notes

Prescriptions

Forms

Bridge

February 2021

Today

Sun

Mon

Tue

Wed

Thu

Fri

Sat

31

1

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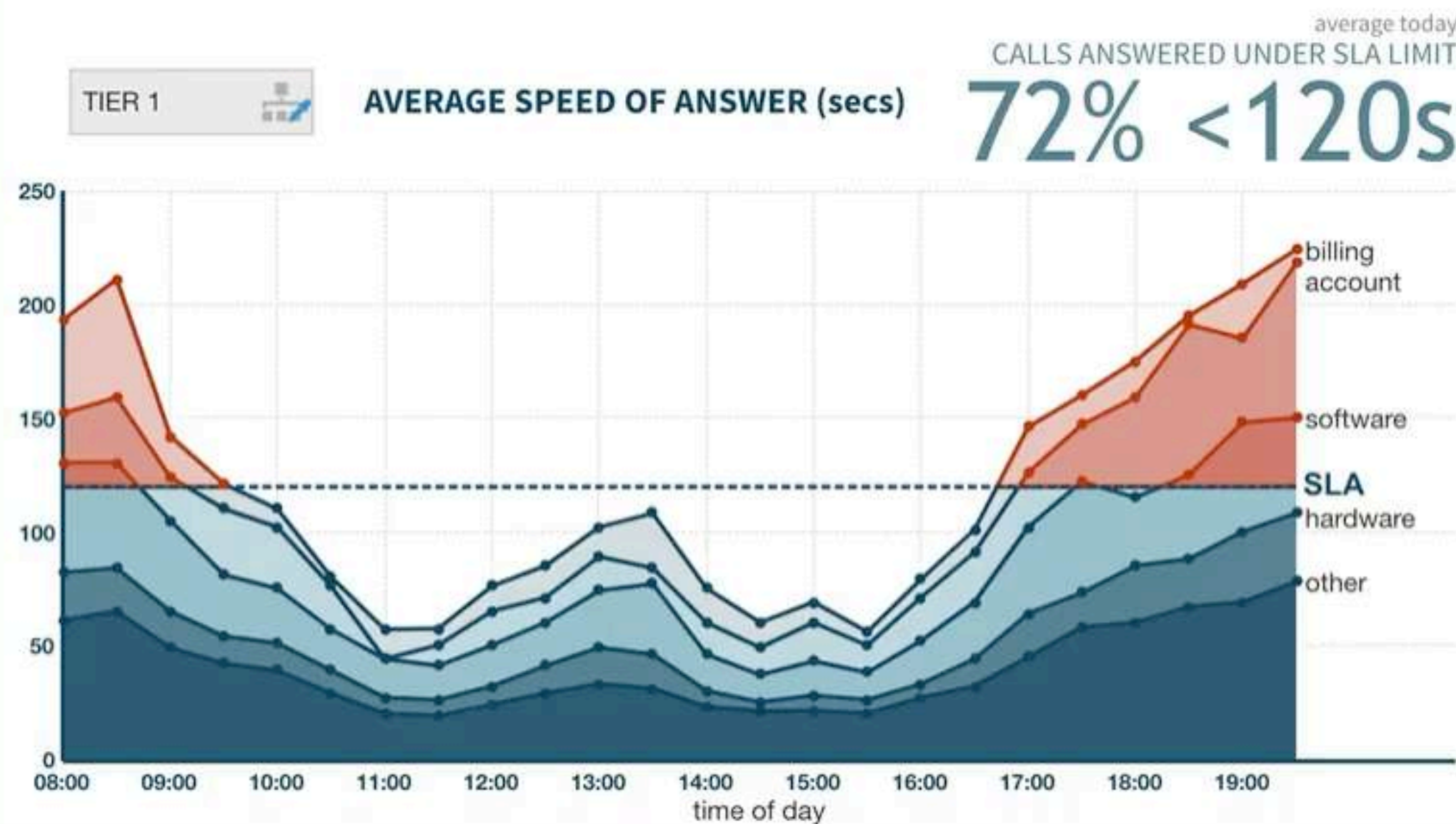
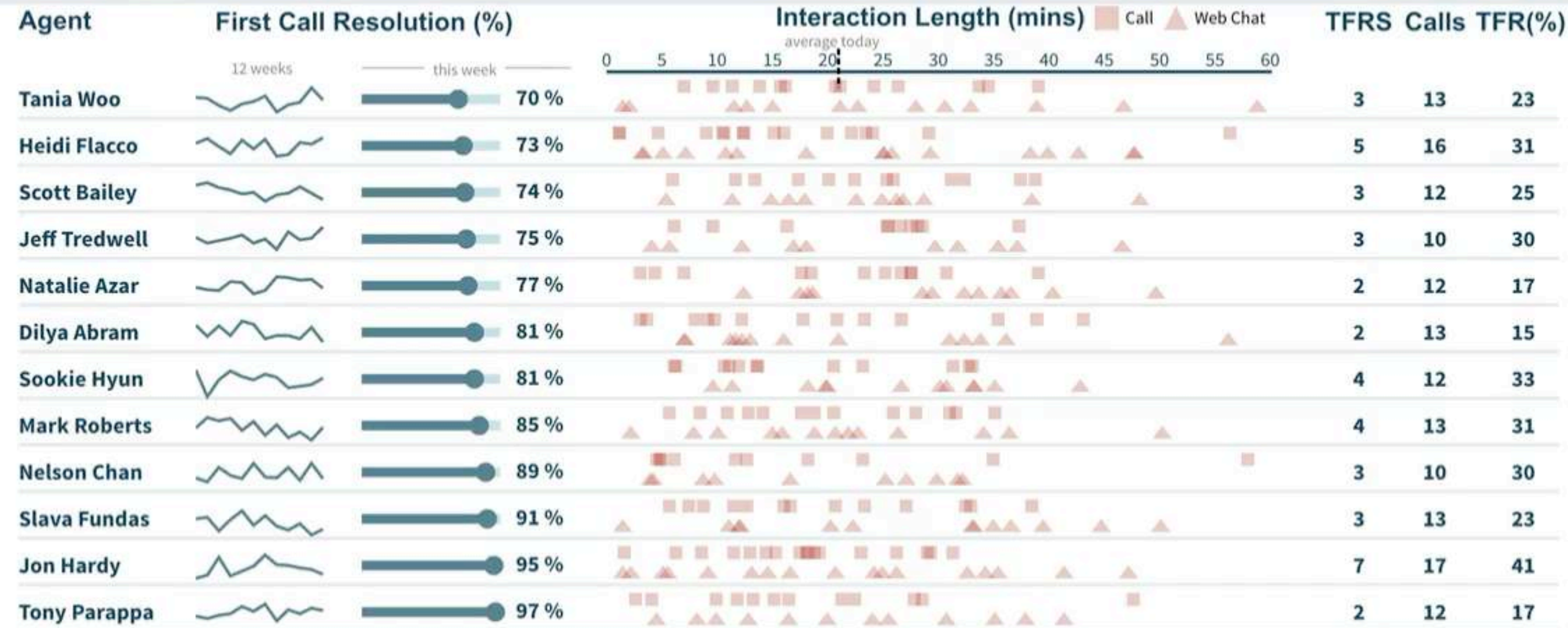
# CALL CENTER DASHBOARD

Dundas Data Visualization Inc.

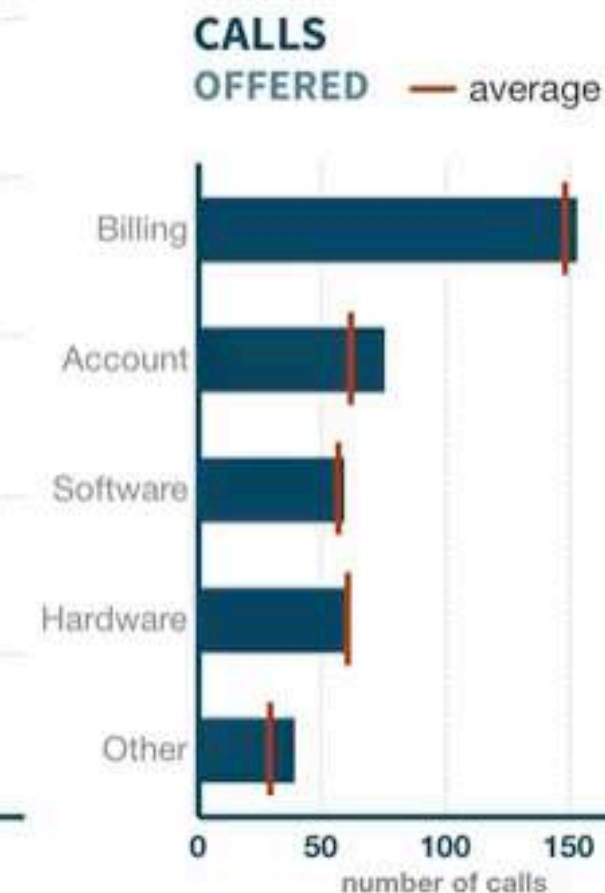
inquiry

Billing

date picker



average today  
TRANSFER RATE  
22 %



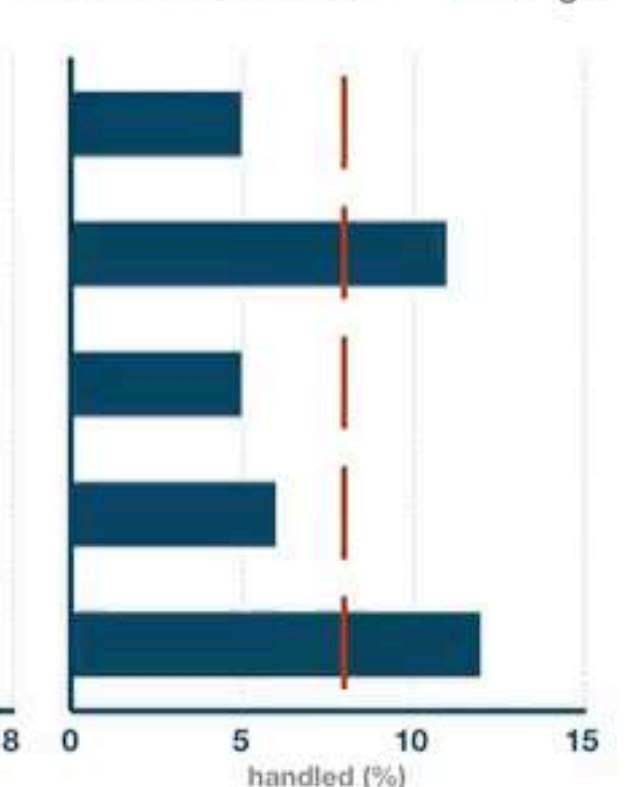
average today  
ABANDON RATE  
5 %

ABANDONED



average today  
TOTAL CALLS TODAY  
382  
CALLS PER MIN  
0.53

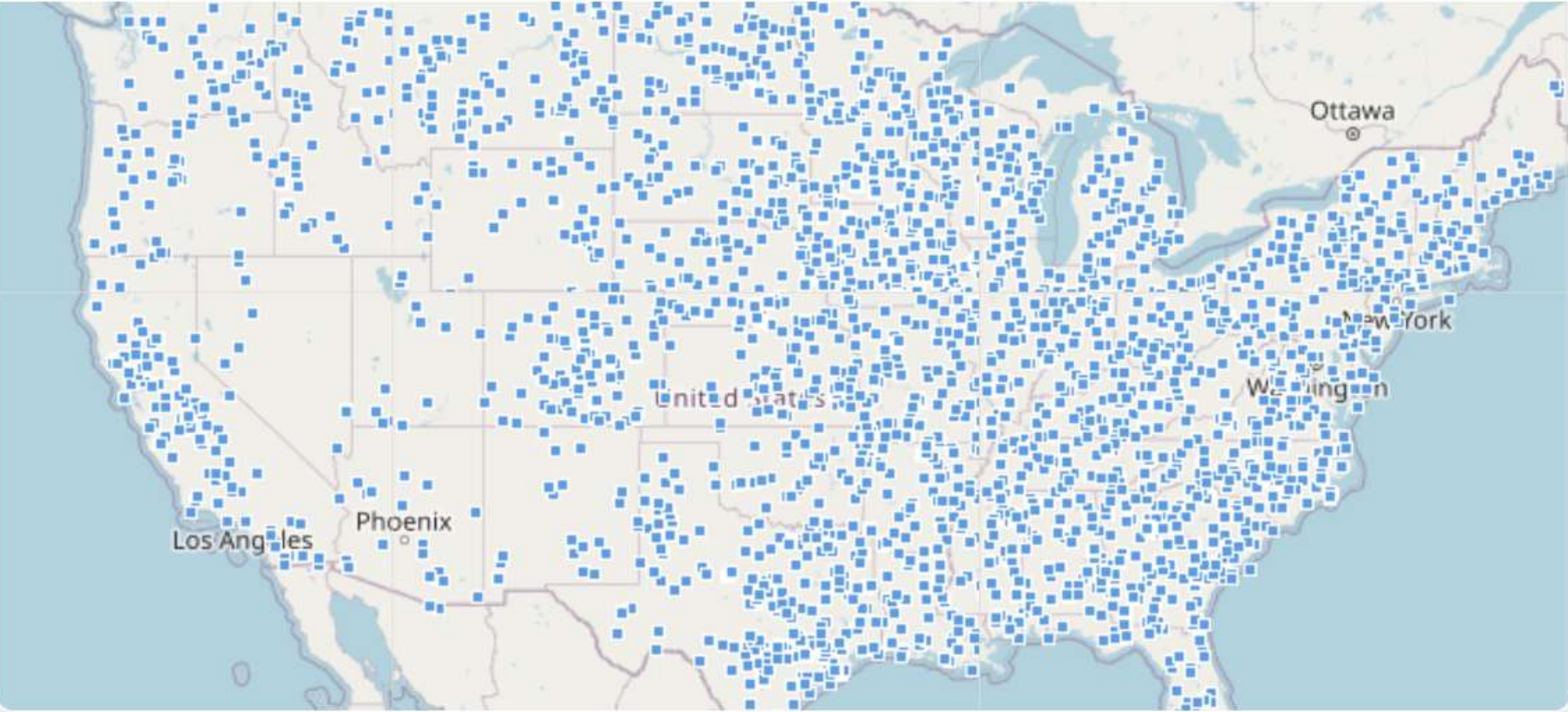
HANDLED BY IVR



State

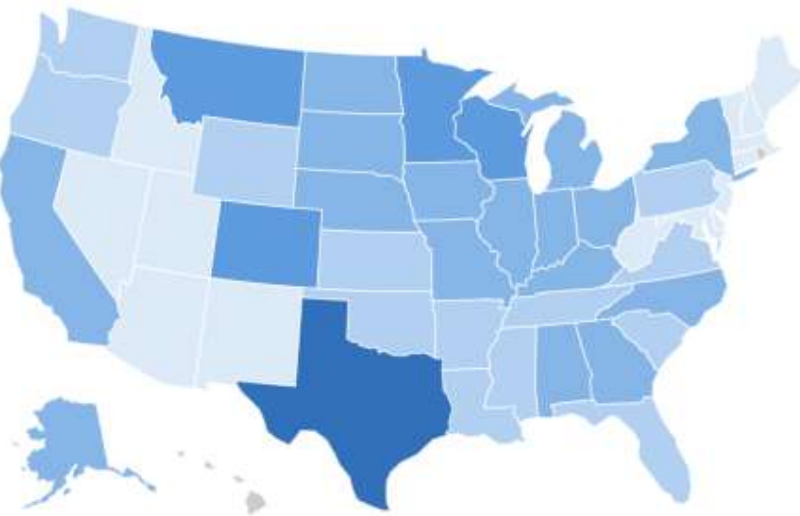
City

People map

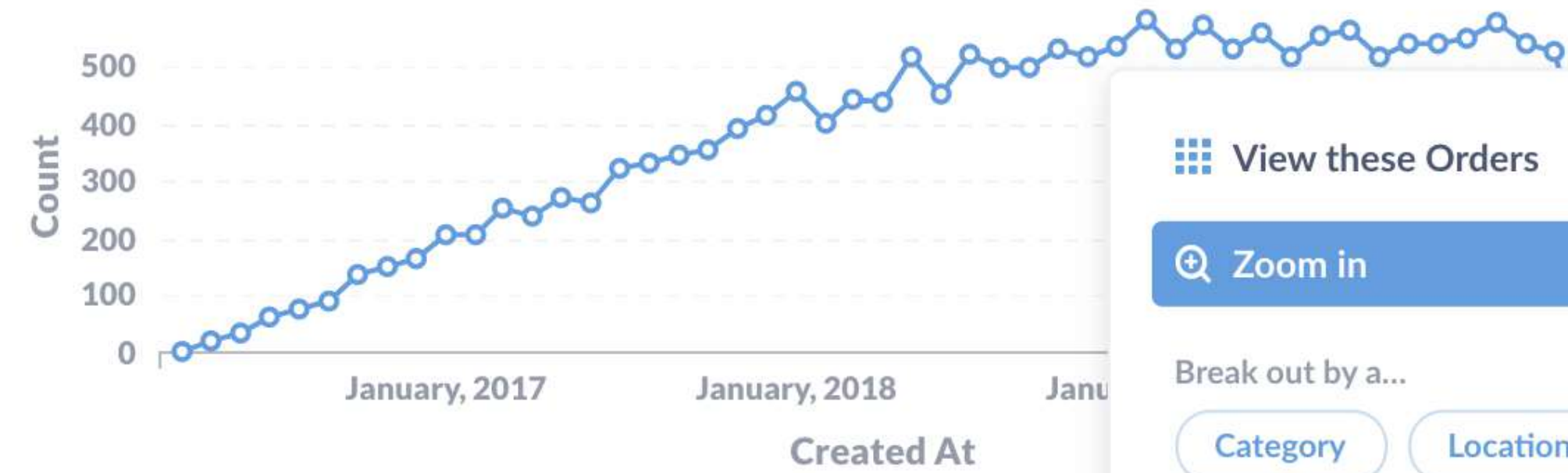


Orders by state

- 21 - 206
- 244 - 423
- 449 - 635
- 706 - 872
- 1,342 +

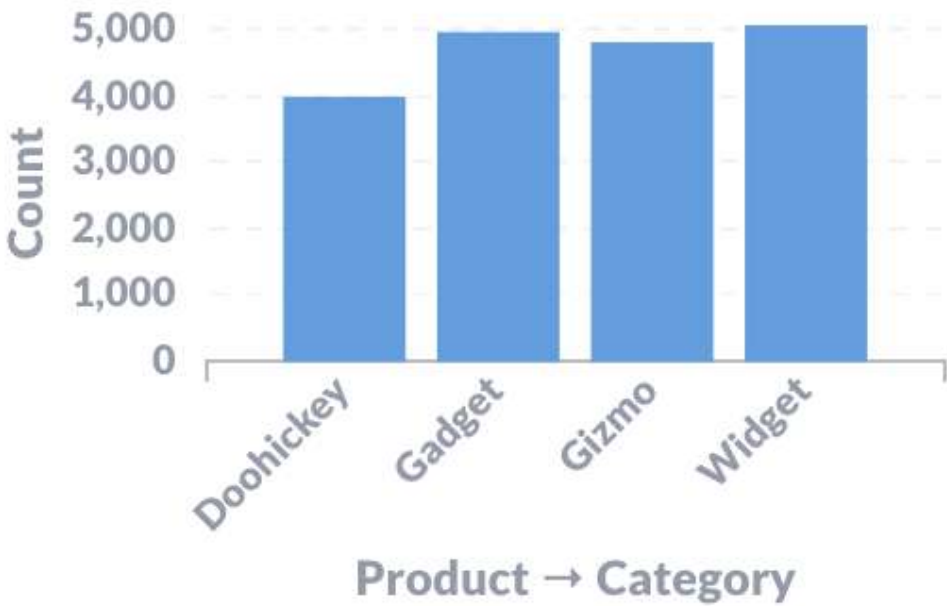


Orders per month



18,760  
Orders

Orders by product category



Orders

Id	User Id	Product ID		Discount (\$)	Quantity	Subtotal (\$)	Tax (\$)	Total (\$)
1508	216	Rustic Marble Bottle	April 19, 2020, 2:07 PM	-	2	68.12	2.72	69.51
14124	1874	Practical Wool Hat	April 19, 2020, 2:01 PM	-	2	125.24	6.26	97.24
11805	1561	Enormous Leather Wallet	April 19, 2020, 1:22 PM	-	2	57.92	2.49	60.17
10753	1417	Enormous Cotton Pants	April 19, 2020, 11:06 AM	-	4	126.20	0	135.71

View these Orders

Zoom in

Break out by a...

Category

Location

Automatic explorations

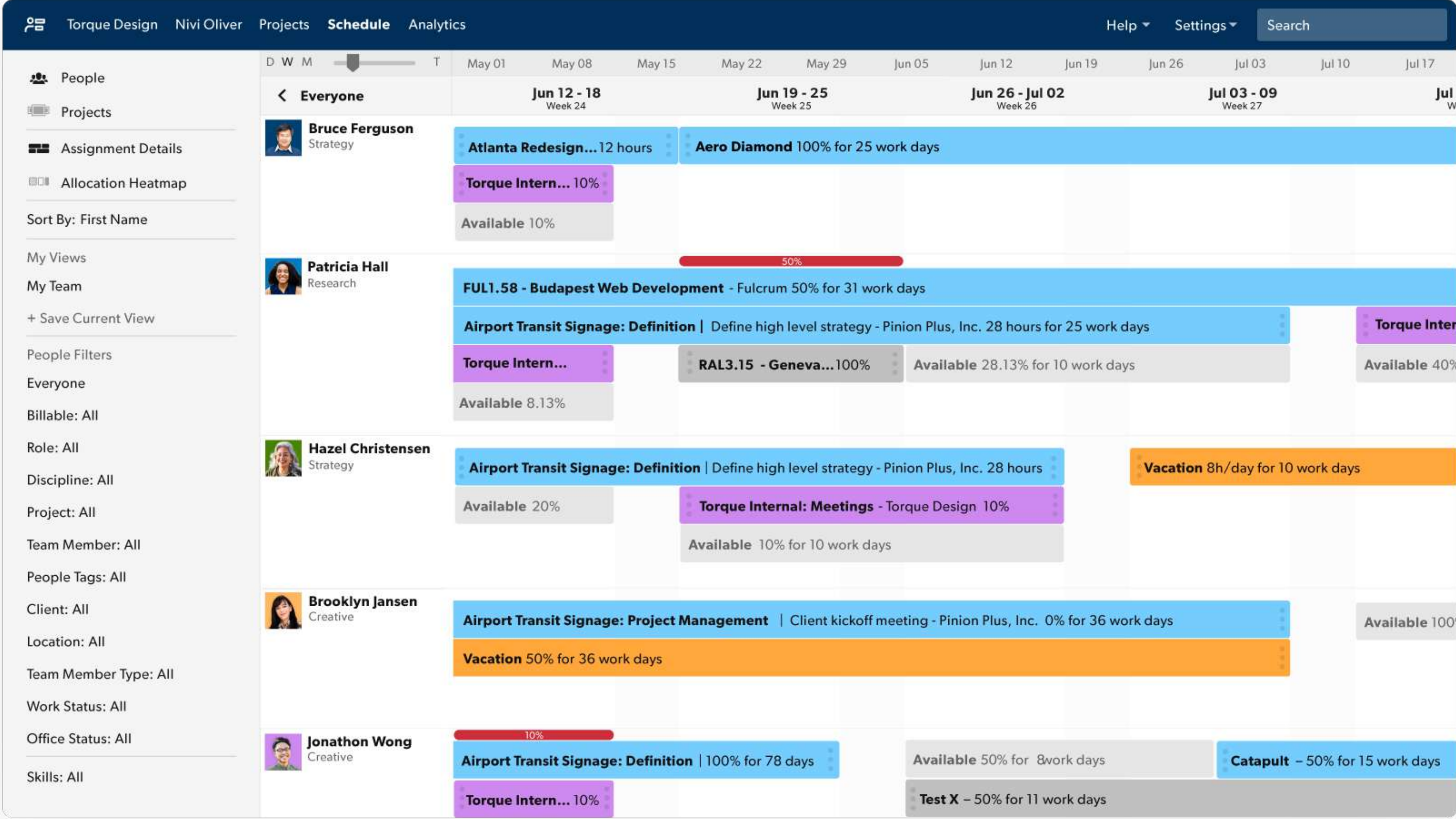
X-ray

Compare to the rest

Complexity

# Enterprise Products

Other products are designed to support *enterprise roles* in large *organizations*. The focus often lies on coordinating *workflows, tasks, people*.





		Script Location	Status	Notes	Scouted By	Features
1		▼ Coffee Shop		Transition from street to shop interior. Smooth close up on		
2		Blue Barn Coffee Roasters	Site Visit	Good transition from street to interior. Easy to light. Easy	Austin Manning	Indoor Outdoor
3		The Last Drop	Research	Great barrista counter. Lots of seating with good crowd	Brian Fisher	Indoor
4		The Steam Room	Research	Great location near beach. Could be great for drone scene	Eleanor Hart	Drone Outdoor
5		Wide Awake Coffee	Short List	Ample room on inside for complicated dolly work. Decent	Brian Fisher	Indoor Dolly
6		▼ Street Mural		Need punchy colors and long walk panning shot		
7		The Habidashery on Venice and	Short List	Bold, abstract graphic colors and palette. Good street	Eleanor Hart	Drone Outdoor Do
8		Fairview St, Parking Lot	Research	Bold yellow. Clean shots and little street noise	Heather Knox	Outdoor Dolly
9		Tree of Life Mural Downtown	Site Visit	Easy access for equipment teams. Bold colors, might be too	Sarah Ferguson	Drone Outdoor
10		6th St Subway Stop	Research	Good lighting at and after dusk.	Brian Fisher	Outdoor Handheld
11		▼ Interior Office/Creative Space for		Creative space, think open floor plan design studio. Need		
12		Downtown Library Quiet Space	Approved	Crisp white palette with a Scandinavian modern vibe and	Austin Manning	Indoor Dolly
13		MBF Corp Conference Room	Research	Great views out windows. Tough morning shot.	Sarah Ferguson	Indoor Views
14		MBF Corp Project War Room	Research	Designer creative space. Lots of props.	Brian Fisher	Indoor Handheld
15		Pike Collective Co-Working	Site Visit	High ceilings and lots of natural light. Wood accents make	Eleanor Hart	Indoor Dolly
16		MBF Corp Breakout Space	Rejected	A bit tight. Have to shoot handheld.	Austin Manning	Indoor Handheld
17		MBF Corp lunch area	Site Visit	A bit tight.		
18		▼ Artist feature		Select a local artist and feature their craft		
19		Shot of their work	Approved	Tufted rug design	Austin Manning	Indoor Dolly
20		Welcome to their studio	Research	Industrial bright studio	Sarah Ferguson	Indoor Views
21		Scene of where they gather inspo	Research	Show other artists	Brian Fisher	Indoor Handheld
22		Their process	Site Visit	Explanation/pano shots	Eleanor Hart	Indoor Dolly
23		Music they jam to	Rejected	Spotify playlists	Austin Manning	Indoor Handheld
24		What's next for them	Site Visit	Scene about their future goals		
25		▼ Food tour		Creative space, think open floor plan design studio. Need		
26		Food truck	Approved	Highlight of top food trucks in the northwest	Austin Manning	Indoor Dolly



# Company Budget Tracking

Add board description

Over Budget

Main Table

Reviewed, ...

Chart

   Integrate / 0

 Automate /

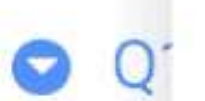
New Item

Search

Person

Filter











Sort



Quick filters Showing all of 20 items

Clear all

Save to this view

Group	Name	VP/Head of	Reviewed?	Budgeted
Top group	Sales	 Noy	 In review	450,000
Q1	Marketing	 Itai Shabtai	 Done	700,000
Q2	Research & Devel...	 Lea	 Stuck	875,000
Q3	Legal	 Cassandra	 Haven't started ...	600,000
Q4	R&D	 Jess		1,200,000
	Operations	 Unassigned		625,000



Switch to advanced filters

						ending	Over/Under Budget?	Remaining Budget
Sales			In review	\$625,000	\$675,000		Over Budget	-50,000
Marketing			Done	\$800,000	\$755,000		Under Budget	45,000
Research & Development			Done	\$500,000	\$615,000		Over Budget	-115,000
Operations			Done	\$750,000	\$700,000		Under Budget	50,000

Complexity

# Information Systems

Other products are designed as large *information systems* that provide access to *information/services* to employees or general public.





Discover History



INDUSTRY

## Private Investors

Private investors - private equity firms, venture capitalists, and hedge funds - deploy capital on behalf of the vital institutions that provide for retirement and administer public coffers. These investors are vulnerable to dramatic shifts in regulation and public perception, particularly amid the upheaval caused by the Fourth Industrial Revolution,

[Read more](#)



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Includes giving birth, fostering, adopting, benefits for children, childcare and schools

[Disabled people](#)

Includes carers, your rights, benefits and the Equality Act

[Employing people](#)

Includes pay, contracts, hiring and redundancies

[Money and tax](#)

Includes debt and Self Assessment

[Births, deaths, marriages and care](#)

Parenting, civil partnerships, divorce and Lasting Power of Attorney

[Citizenship and living in the UK](#)

Voting, community participation, life in the UK, international projects

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Includes vehicle tax, MOT and driving licences

[Environment and countryside](#)

Includes flooding, recycling and wildlife

[Passports, travel and living abroad](#)

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[Business and self-employed](#)

Tools and guidance for businesses

[Crime, justice and the law](#)

Legal processes, courts and the police

[Education and learning](#)

Includes student loans, admissions and apprenticeships

[Housing and local services](#)

Owning or renting and council services

[Visas and immigration](#)

Apply to visit, work, study, settle or seek asylum in the UK

gov.il > Citizenship, documents and passports > Registration and changing personal information > Change your address

# Change your address

Change your registered address on your ID slip online, by post or in person, and get the updated ID slip.

Share:      

לשינוי כתובת

Online application via GovID

## Who can change their address online

You can register a new address online for yourself and your children who are under 18 if you're:

- an Israeli citizen or resident
- and currently in Israel

You can also register a different [address for receiving mail by post](#).

**Note!**  
Before applying online, check below to make sure that you don't need to apply in person

**You always need your ID card when applying in person.**

You'll need to apply in person and submit supporting documents if:

## Population and Immigration Authority

**Piba Central Contact Center**  
**\*3450**

Dial from a landline: 1-222-3450  
Dial from abroad: +972-2-62946666  
Email: [info@piba.gov.il](mailto:info@piba.gov.il)

Call center operating hours:  
[Piba Central Contact Center](#)

[More online services](#)  
[Self service stands](#)  
[Population and Immigration Authority offices](#)  
[Fees and payments](#)

## More on the subject

Complexity

# Legacy Systems

Largest systems are difficult to *upgrade* and expensive to maintain. Changes take *time* and data is often *locked-in*, making it difficult to migrate.

# DEMOGRAPHICS

CALL OR VISIT US FOR A DEMO  
(407) 915-8004  
WWW.PRONTOEMR.COM

Contacts, alerts, appointment history, insurance coverage and specific treatment information

FileEditViewInsertRecordsSaved FindsWindowHelp

2 / 35091 Found (Unsorted)

Show AllNew RecordDelete RecordFindSortShare

Layout: Patient DemographicsView As:Preview

AAEdit Layout

Active13323Test, Mirna48

Patient StatusPatient IDPatient NameAge

Print DemographicsCalendarAppointment HistoryRe-ActivationPatient Balance:

Click to insert Picture

INSURANCE

AETNA Commercial12345\$50.0010/31/2017Insurance HistoryNew Insurance

\*Prefix / SuffixMissMiss Mirna Test

\*Name, First, M, LastMirnaTest

Refer to patient asMirnaSSN #XXX-XX-2700Change

Date of Birth1/1/1970GenderFemale

Home Address1234 test laneGo To Postal Address

City, State, ZipCumberlandMD21502

Cell Phone(407) 222-3592Best Msg ByMsg By

Home Phonenone

Work Phonenone

EmailMirnaT@mirna.com

Employment/School StatusUnemployedGrade

School/EmployerN/A

Marital StatusOtherEthnicityLatino

ReligionCatholicRaceHispanic

Preferred LanguageEnglish

Location:Las VegasCreated by:Scaletta, Timothy

Caller:654 165 1321Creation:7/14/2014 5:57:07 PM

Demographics Last Update:1/31/2018

Demographics Next Update:1/31/2019

Signature

CONTACTS

NamePhoneFaxEmail

MotherHolly Golightly(654) 165-1321Holly@tiffany.com

FatherUnknownN/AN/A

PCPLiberty Valance(654) 564-6513(654) 564-6500LV12@Valance.com

PharmacyPublix @ Saxon BLVD(654) 651-3132(654) 651-3100Publix@publix.com

School ContactN/AN/AN/A

Referred ByFriendElle FriendlyN/AN/A

Case WorkerNoN/AN/AN/A

Legal GuardianNoN/AN/AN/A

Emergency ContactHolly Golightly(654) 165-1321N/AHolly@tiffany.com

2GuarantorMirna Test(407) 222-3592

TREATMENT

In treatment Previously?☐ Yes☒ No

Currently in Therapy? (Outside)☒ Yes☐ No

Psychiatric Advance Directive?☒ Yes☐ No

Court Case?☐ Yes☒ No

Court Order Treatment?☐ Yes☒ No

Legal Guardianship Documents?☐ Yes☒ No

Agreed to Telemedicine?☒ Yes☐ No

Where?Cumberland County MHC

Attempts123Received?☐ Yes☒ No

CommentCaller very nervous on phone

Note7/2/2018 11:09:33 - Jose Munoz, MD

Comment: P

System Info: Patient List |

6/21/2018 13:32:55 - Jose Munoz, MD

Comment: Test comment

Whom can bring to appointmentPatient

Whom can change appointmentPatient

🏠 Dashboard

📅 Appointment ▾

📅 Patient Registration ▾

👤 Outpatient Management ▾

📅 Health Checkup ▾

🧪 Laboratory ▾

🏥 Radiology ▾

🏥 Inpatient Management ▾

📄 Inpatient Billing ▾

👤 Nurse Station

📅 Operation Theatre ▾

📅 Blood Bank ▾

📅 Review Doctor

📅 User Management

Dashboard



APPOINTMENT



PATIENT  
REGISTRATION



OUTPATIENT  
MANAGEMENT



HEALTH  
CHECKUP



LABORATORY



RADIOLOGY



INPATIENT  
MANAGEMENT



INPATIENT  
BILLING



NURSE STATION



OPERATION  
THEATRE



BLOOD BANK



REVIEW DOCTOR



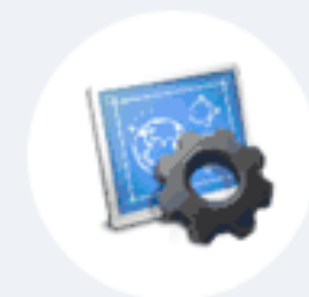
MIS REPORTS



PHARMACY



SOFTWARE  
MANAGEMENT



SYSTEM  
CONTROL



PHLEBOTOMY



STORE  
MANAGEMENT



OPD CLINICAL  
MANAGEMENT



TALLY



MRD



DOCTOR  
ACCOUNTING



ASSET  
MANAGEMENT



CSSD



EQUIPMENT  
MAINTENANCE



DOCTOR  
MANAGEMENT



PHYSIOTHERAPY



HR MANAGEMENT



DISCHARGE  
SUMMARY



HOUSEKEEPING  
AND LAUNDRY  
MANAGEMENT



CANTEEN  
MANAGEMENT



AMBULANCE  
MANAGEMENT

Scan Barcode Now...

Quantity

1

Search

Sub Total

\$30.16

Tax

\$2.55

Grand Total

\$32.71

#	Item Info	Quantity	Price
1	7278300300 @ 1 @\$8.99 ANCHOR LIBERTY ALE 12OZ 6PK*	1	\$8.99
2	3907601031 @ 1 @\$6.49 BLK DIAMOND CHEDDAR 80		
3	1757355321 @ 1 @\$8.99 ALICE WHITE CAB SAUV 750		
4	2549816007 @ 1 @\$1.99 CAJUN SPICY HOT PEANUTS		
5	4111800901 @ 1 @\$3.69 CHEESE PIZZA*		

1  
CashierA  
Change  
Cashier IDB  
Open DrawerC  
Clock In /  
Clock Out2  
Invoice  
PropertiesD  
Recall InvoiceE  
Recall On-  
Hold InvoiceF  
Display On  
Hold IDs3  
ToolsG  
Look Up  
CustomerH  
Price CheckI  
Return  
Rentals4  
SetupJ  
Check Gift  
Card BalanceK  
Hold and PrintL  
Print Receipt5  
AdministrativeM  
Print Docket  
(no prices)N  
Print Gift  
Receipt for  
Last InvoiceO  
Pullback  
Invoice

Exit

PAY

D  
H

TS Lookup

Options

K

CREDIT/DEBIT

ACCOUNT

INVENTORY ADJUST /  
RECEIVE

Info Customer Notes

101 -- Cash Customer



DELETE

DISCOUNT  
Ctrl + LQUAN  
CHANGEPRICE  
CHANGE

FIND



QUICK FIND

F1 - Help

F2 - Inventory

F3 - Clock In/Out

F4 - Customers

F5 - Price Check

F6 - Cash Sale

F7 - Check Sale

F8 - CC Sale

F9 - On Account

F10 - Cashier Fxns

F11 - Invoice Info

F12 - Item Options

12:34 PM  
8/11/2013

Tesler's Law

# Conservation Of Complexity

*Complex systems* always *preserve* their complexity. We can't *remove complexity*; it has to be *dealt with*. The question is, how much *technical burden* we put on the user, and how much on ourselves.

---

*Tesler's Law, "Conservation of Complexity"*

Tesler's Law

# Conservation Of Complexity

*Successful organizations* do neither.

They put the burden on *technologies*: i.e.  
standardized, optimized and automated  
*processes*. This often happens *via design*.

Designing For Complex Systems —

# Design KPIs

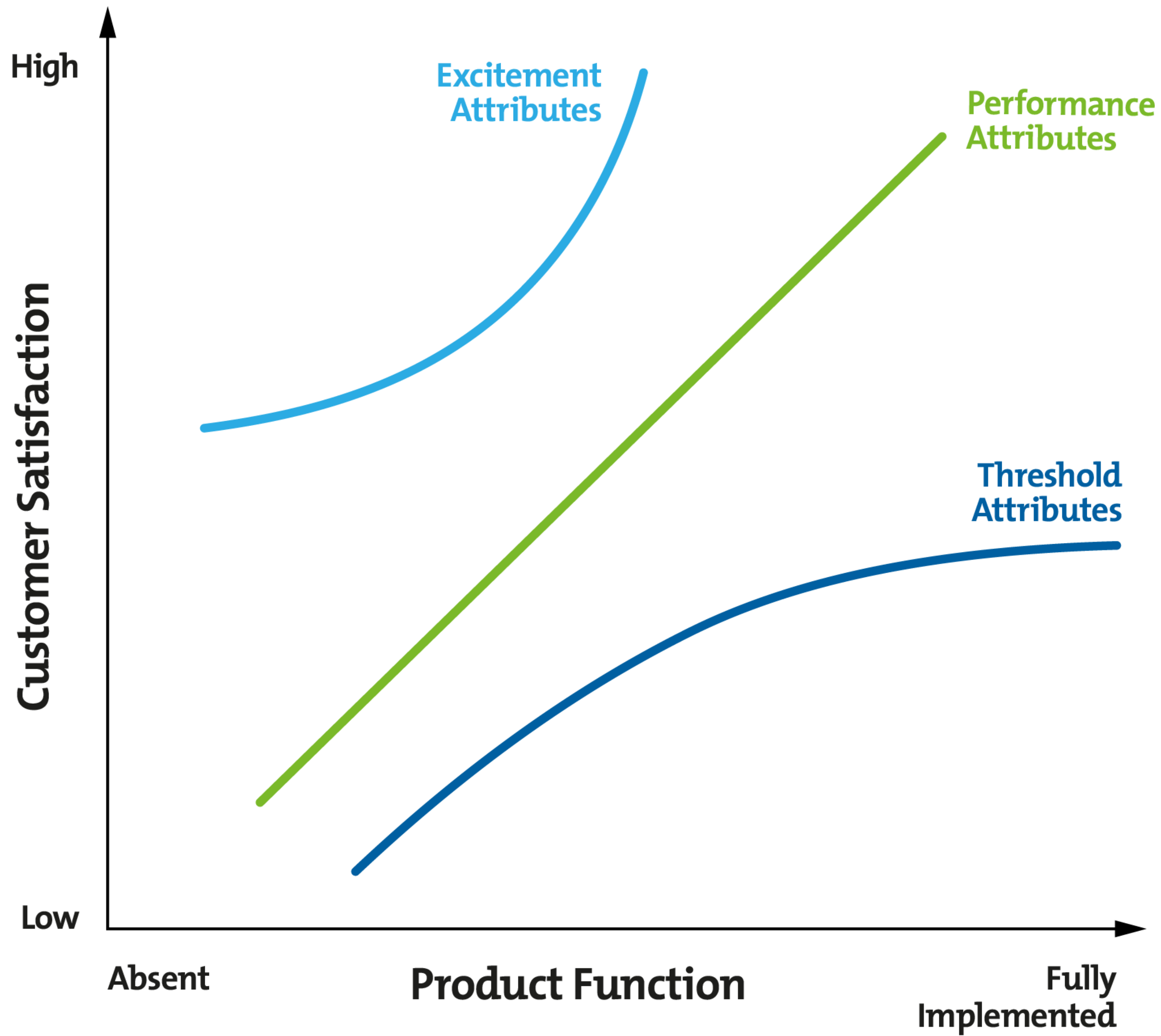
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# Noriaki Kano

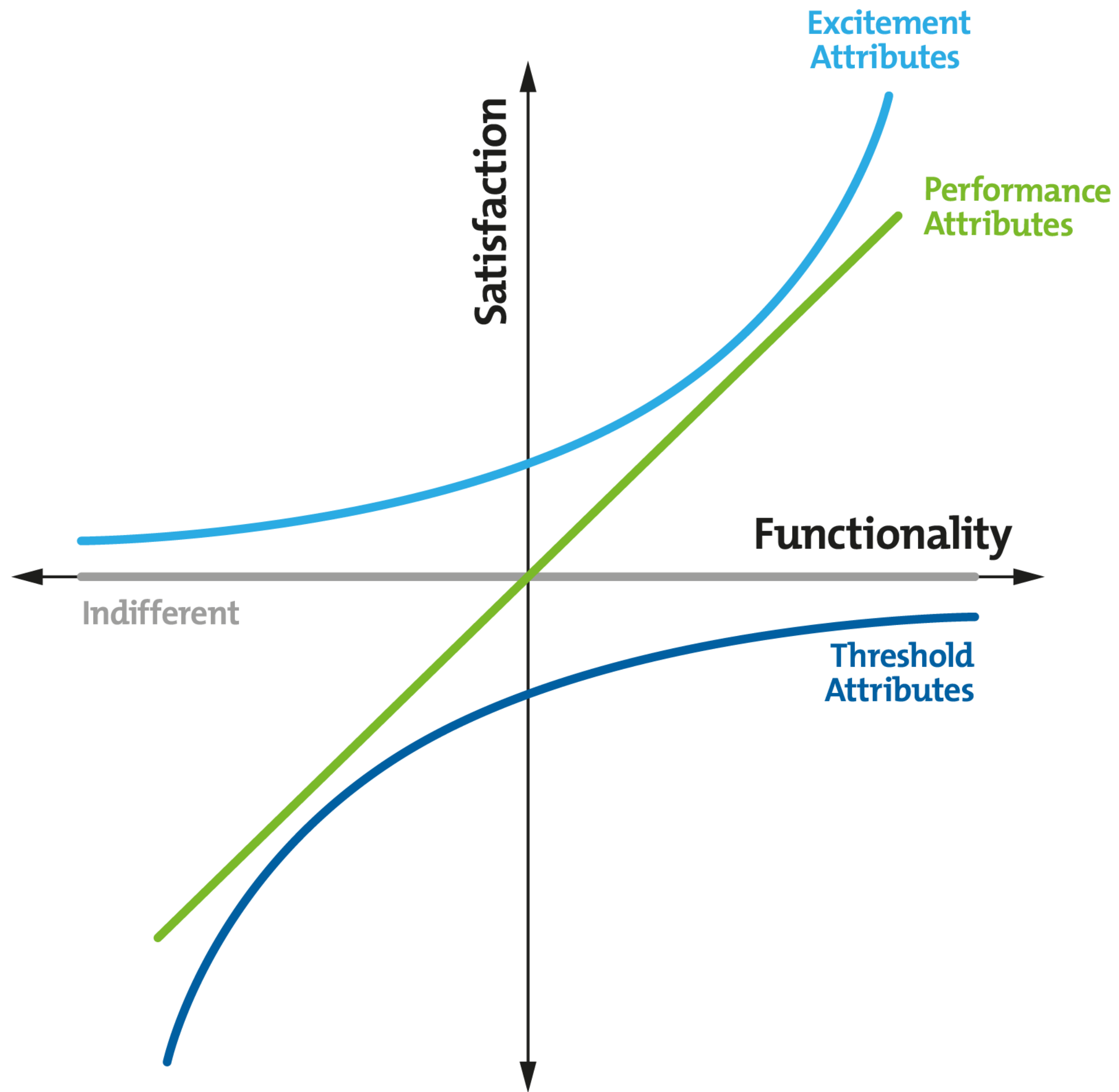
Professor of engineering,  
University of Tokyo





# Kano Model

- *Threshold* attributes are all about *basics*.  
Basic expectations that customers have.
- *Performance* attributes are all about *satisfying*.  
These are the things customers know they want.
- *Excitement* attributes are all about *delighting*.  
These are the things customers don't know they want.



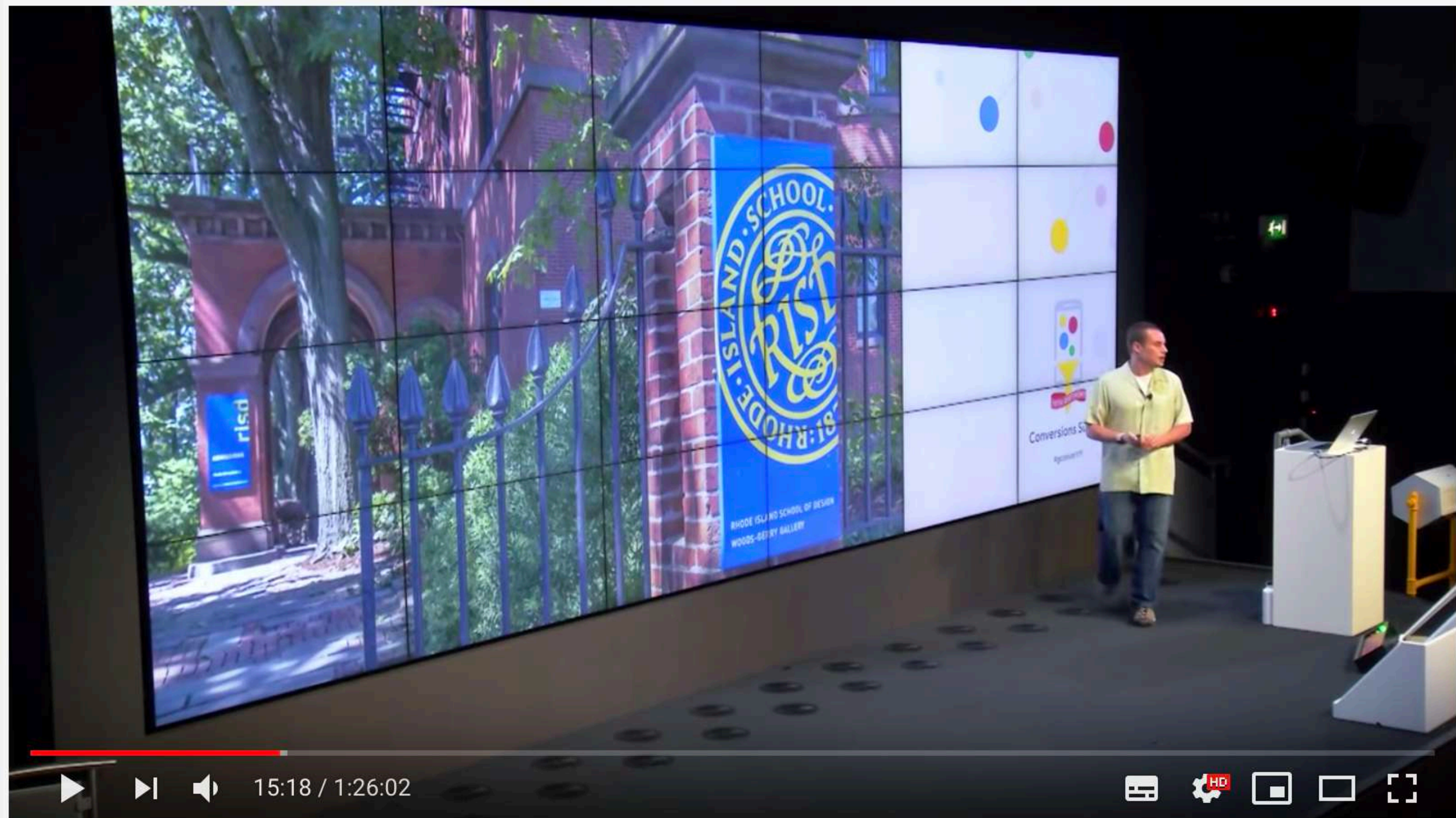
# Excitement Attributes

*Excitement attributes* is why people stay.  
We identify *pain points* and *slowdowns*  
and solve them with *good design*. But: we  
need to get the other attributes right first.

Design KPIs

# Design Has Good ROI

*Competing via design* is much easier and cost-effective than competing in features. We can *hide complexity* away from users, but we need to *design the right thing*.



➦ **Mind The Gap**, Luke Wroblewski, <https://youtu.be/mAiNdU1go1A>

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# Reducing The Gap

*Design* works best when we reduce the gap between a user and the maker. As organizations grow, *gaps* start forming: more distance between *decision makers* and the actual *customers*.

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*Luke Wroblewski, “Mind The Gap”*

# Design KPIs

With *design KPIs*, the design process is always driven by *constraints* and *user-centric goals*. The outcome is an *evidence-based* design without subjective or random decisions.

# Useful Constraints

- 01** – High top task completion rates
- 02** – High top task completion times
- 03** – High error recovery rate
- 04** – Supporting 8 languages
- 05** – Fully accessible (AAA level)
- 06** – Performance-focused
- 07** – GDPR-compliant
- 08** – Minimal environmental impact
- 09** – Focus on driving leads
- 10** – Reduce the customer support inquiries
- 11** – Improving the speed of publishing
- 12** – No breaking changes
- 13** – Quick jumps between views
- 14** – Never lose user's input
- 15** – Technical limitations
- 16** – % of screen dedicated to content
- 17** – Technical independence
- 18** – Evidence-based design
- 19** – GDPR-compliant 3rd-parties
- 20** – Keep all advertising units
- 21** – Established loading sequences
- 22** – Concise statement of work

# Design KPIs

**Improve!** Top tasks completion rate.

**Reduce!** Top tasks completion time.

**Reduce!** Time to relevance.

**Reduce!** Frequency of errors.

**Improve!** Error recovery speed.

**Improve!** Accuracy of data.

**Improve!** Engagement rate.

**Improve!** Accessibility and perf.

**Measure!** Dead-ends and lock-outs.

**Reduce!** Service desk inquiries.

**Reduce!** Confusing encounters per visit.

**Reduce!** Negative encounters per visit.

**Reduce!** Time to publish.

**Reduce!** Maintenance costs.

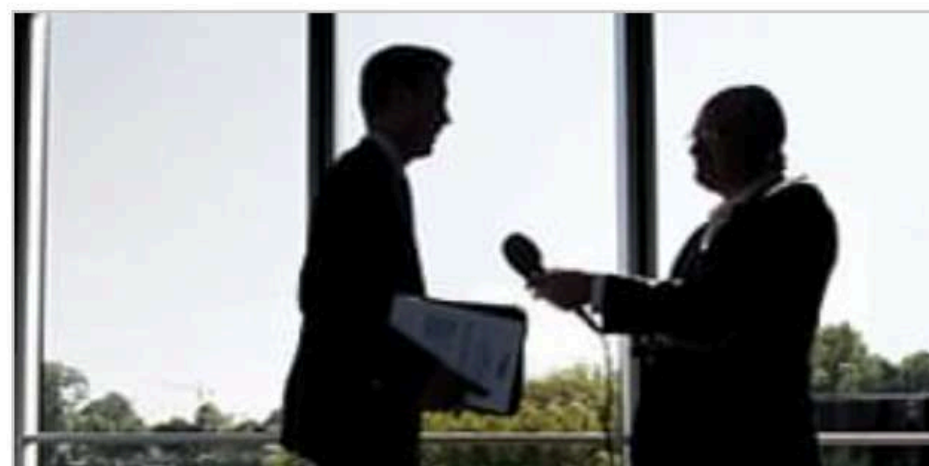
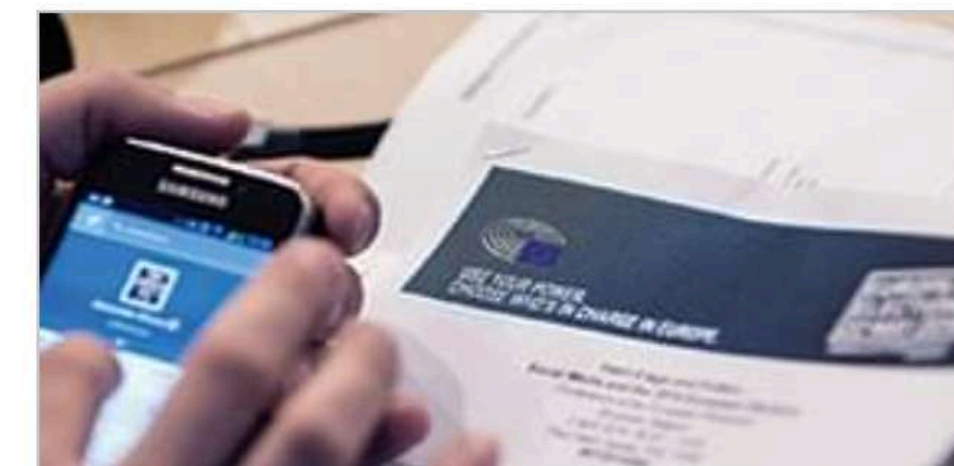
**Reduce!** Environmental impact.

**Increase!** “Turn-around” score.

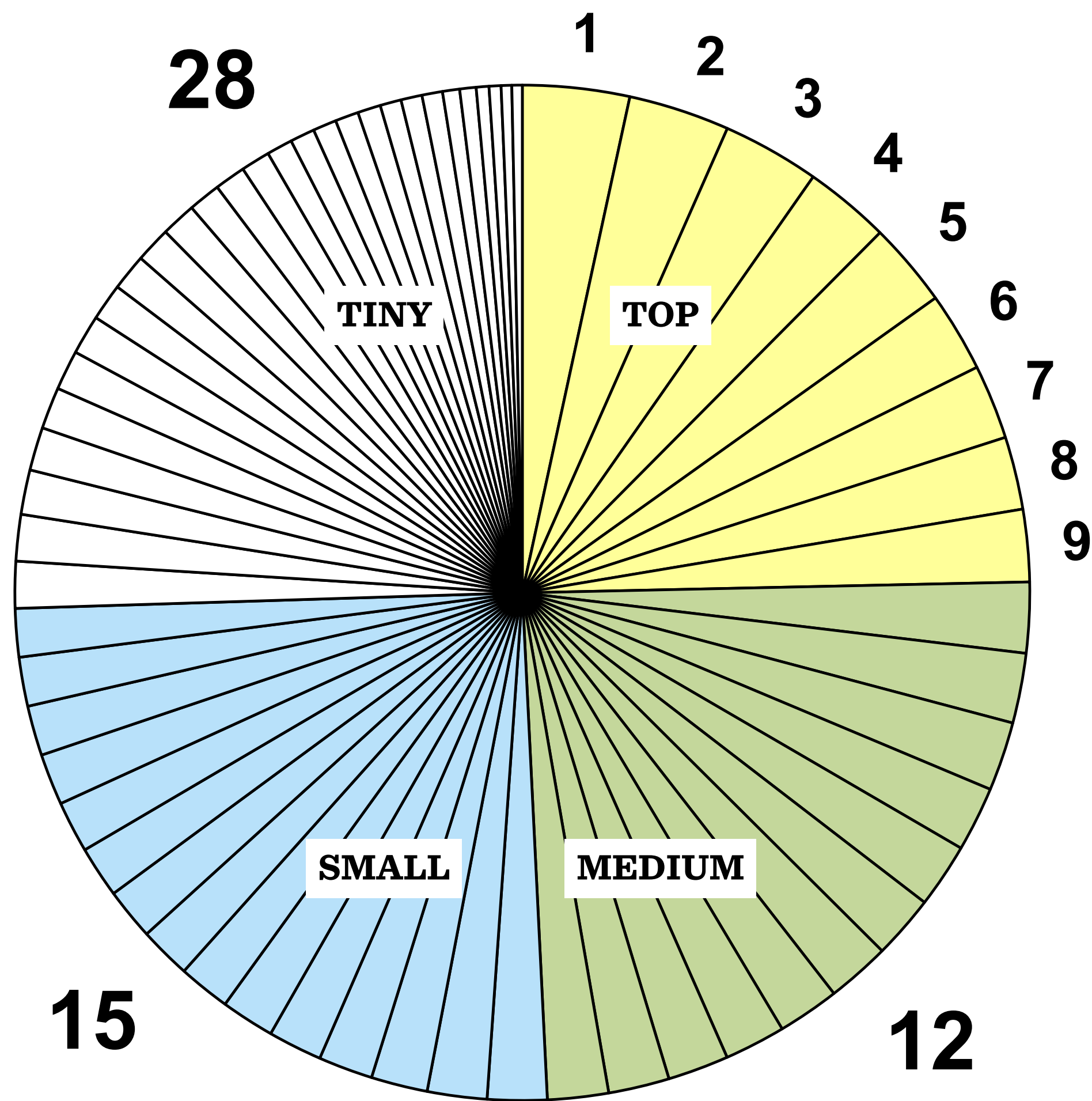
**Watch the committees live**

## Stay informed

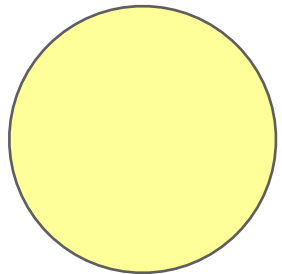
Stay updated on what Parliament is doing. Check out the latest news, watch our meetings live and follow MEPs on social media.

**Today in Parliament****Latest news****Videos and live streamings****MEPs on social media**

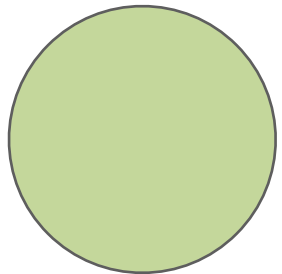
**Public: In relation to the European Parliament select up to 5 things that are most important to you.**



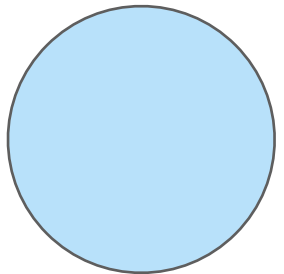
# Public: Table of Tasks



Top 25%



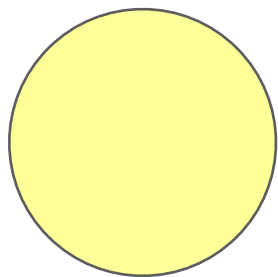
26–50%



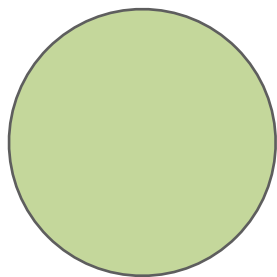
51–75%

	Tasks	Votes (23,201)	% of 5,602 Voters
1	EU treaties, laws, rules, judgments	789	14%
2	Implementation of EU law	747	13%
3	Transparency, ethics, standards of conduct	718	13%
4	Legislation impact (societal, country, economic)	634	11%
5	Freedom of information, request access to documents	624	11%
6	Parliament in session (plenary, live streaming, documents, votes)	588	10%
7	Jobs, traineeships, volunteering at the European Parliament	551	10%
8	Parliament powers (legislative, budgetary, scrutiny)	537	10%
9	Legislative key priorities, themes, issues	533	10%
10	News, announcements, press releases	521	9%
11	Advocacy, proposing new laws, amendments, ideas	516	9%
12	Monitoring compliance of EU law	510	9%
13	MEPs (profile, contact, activities)	478	9%
14	European Parliament relationship with other EU institutions	476	8%
15	Policy research (issues, trends)	469	8%
16	Legislative process (how it works)	468	8%
17	Lobbying (how to, rules, transparency register)	457	8%
18	Committees (agenda, visits, reports)	451	8%
19	Educational materials, programmes	451	8%
20	About the EU (what it is, role, history)	450	8%

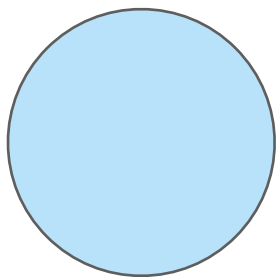
# Public: Table of Tasks



Top 25%



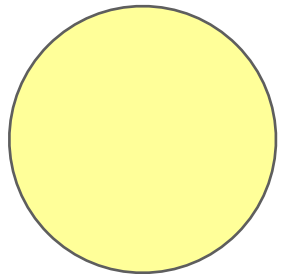
26–50%



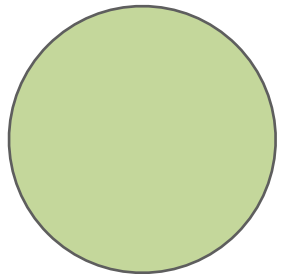
51–75%

	Tasks	Votes (23,201)	% of 5,602 Voters
21	Tracking, monitoring (legislation, resolutions)	450	8%
22	About the European Parliament (what it is, role, history)	440	8%
23	Languages (translation, interpreting)	440	8%
24	European Parliament elections	417	7%
25	European Parliament publications	402	7%
26	European Union publications	400	7%
27	EU institutions' position on proposed legislation	395	7%
28	European Parliament in your country (offices, activities, visits)	384	7%
29	Topic overviews, summaries, fact sheets	383	7%
30	Political structure of the European Parliament	381	7%
31	Myths, fake news, misinformation	380	7%
32	Privacy, data protection	380	7%
33	Physical visit to the European Parliament	379	7%
34	Make a complaint, request an investigation (whistle-blowers, fraud)	369	7%
35	Public register of documents, official documents	362	6%
36	Public consultations	357	6%
37	Statistics	345	6%
38	Public opinion polling (Eurobarometer)	343	6%
39	Raw data, data access, data sets	329	6%
40	Contact the European Parliament	319	6%

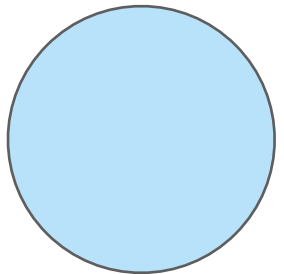
# Public: Table of Tasks



Top 25%



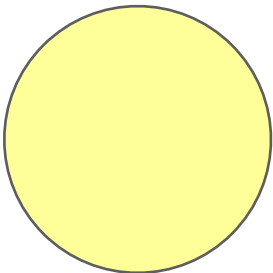
26–50%



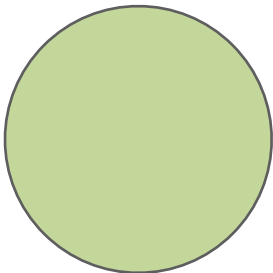
51–75%

	Tasks	Votes (23,201)	% of 5,602 Voters
41	Grants	308	5%
42	MEPs responsible for proposed legislation	293	5%
43	Conferences, events, exhibitions	292	5%
44	Parliament procedures, rules	273	5%
45	Historical archives	269	5%
46	Petitions (rules, setting up)	263	5%
47	Annual accounts, financial reports, budget	259	5%
48	Photos, infographics, recordings, videos	239	4%
49	Issue / topic based groups in Parliament	229	4%
50	Administrative structure of the European Parliament	215	4%
51	Follow European Parliament on social media	191	3%
52	Election monitoring, observation	182	3%
53	Online interactive visit to European Parliament (tour, activities)	174	3%
54	EU political appointments vetting, process	173	3%
55	President of the European Parliament (profile, agenda)	170	3%
56	Delegations (agenda, visits, reports)	156	3%
57	Providing services to the European Parliament	156	3%
58	Request scrutiny of legislation	152	3%
59	Accreditation (journalists, lobbyists, visitors)	126	2%
60	EU glossary, abbreviations, acronyms	121	2%

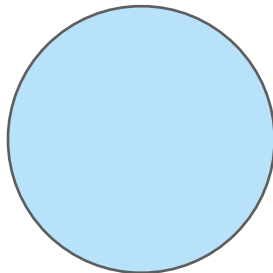
# Public: Table of Tasks



Top 25%



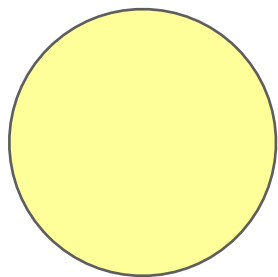
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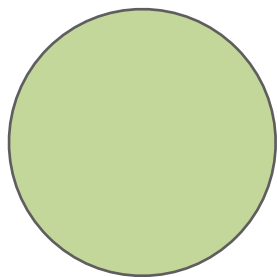
51–75%

	Tasks	Votes (23,201)	% of 5,602 Voters
61	Prizes, awards	94	2%
62	Secretary-General	88	2%
63	Event patronage, endorsement	78	1%
64	Branding materials (style guide, permissions, logos)	77	1%
	Total	23201	

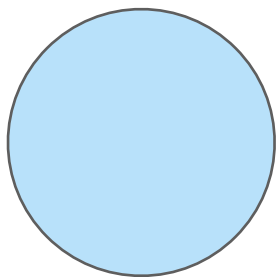
# 30 Tasks for Sorting



Top 25%



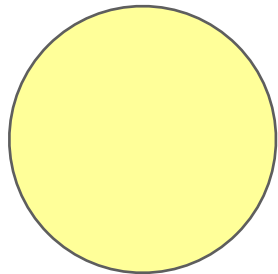
26–50%



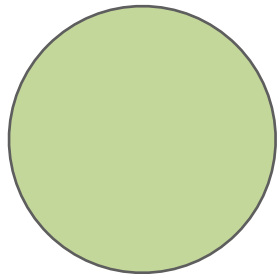
51–75%

	Tasks	% of total
1	EU law, rules, treaties, judgments	5,2 %
2	Research and innovation	5,2 %
3	Funding, grants, subsidies	5,0 %
4	Education and training in EU	3,7 %
5	EU strategy, political priorities	2,8 %
6	Environmental protection	2,8 %
7	Jobs, traineeships at the European Comission	2,5 %
8	Find a job in another EU country	2,4 %
9	EU news, announcements, press releases	2,3 %
10	Human rights, fundamental rights	2,2 %
11	Working in an EU country (rights, permits, benefits)	2,2 %
12	Order, download an EU publication	2,1 %
13	Track policy and law making process, updates	2,1 %
14	Statistics and forecasts	2,1 %
15	About the EU (role, structure, how it works, origin)	1,9 %
16	Food and farming (production and safety)	1,7 %
17	Climate change, global warming	1,7 %
18	Regional, rural and urban development	1,6 %
21	Product safety, conformity, certification	1,5 %
24	Culture (heritage, arts, films, Capitals of Culture)	1,5 %

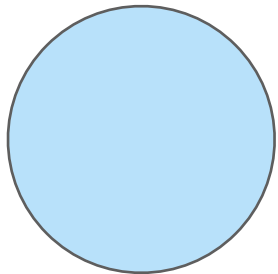
# 30 Tasks for Sorting



**Top 25%**



**26–50%**



**51–75%**

	Tasks	% of total
25	Doing business in the EU	1,5 %
26	Economic growth, financial stability in EU	1,4 %
27	Doing business with EU Commission (tenders, bids)	1,4 %
29	Industry norms and standards	1,3 %
33	Travel within, to and from EU (documents, visa, currencies, consular help)	1,2 %
35	Banking and financial markets (reform, regulation)	1,1 %
36	Relations with non-EU countries, international organizations	1,1 %
38	Competition (state aid, cartels, mergers, anti-trust)	1,0 %
39	Development and humanitarian aid	1,0 %
43	Loans, access to finance, microfinance	0,9 %
63	Accession of new countries to the EU, enlargement	0,9 %

# Tasks Sorting

Get 15–30+ people to independently sort the tasks into *groups*. Give them a survey afterwards to double check how *representative* they are.

# Top Tasks Sorting

EU strategy, political priorities
Doing business in the EU
EU news, announcements, press releases
Food and farming (production and safety)
Order, download an EU publication
Conferences, summits, meetings, events
Industry norms and standards
Public health, disease prevention

▼ Click to rename X

Environmental protection

Climate change, global warming

▼ Click to rename X

Working in an EU country (rights, permits, benefits)

Find a job in another EU country

Parliament in session (plenary, live streaming, documents, votes)	7	Plenary	Inside EP
Committees (agenda, visits, reports)	6	Committees	
Delegations		Delegations	
MEPs (profile, contact, activities)	5	MEPs	Internal affairs
Legislative process		Priorities	About Parliament
Parliament powers (legislative, budgetary, scrutiny)			
Parliament procedures, rules	4		
Administrative structure of the European Parliament	1		
About the European Parliament (what it is, role, history)	1	How Parliament works	
EU treaties, laws, rules, judgments		EU Legislation	Laws and treaties
Implementation of EU law			
Monitoring compliance of EU Law			
Legislation impact (societal, country, economic)			
Lobbying (how to, rules, transparency register)			Contribute
Advocacy, proposing new laws, amendmends, ideas			Influence
Freedom of information			Engagement

# Measuring Design KPIs

Every 4–6 months, we give the same *task instructions* to the same *audience segments* and measure success rates and completion times. *Frequency* depends on the team's ability to make changes.

# Task Instructions

“Find out about the *latest legislation* by European Parliament on *GDPR*.”

“Find out about existing *EU subsidies* in Eastern Europe due to Covid-19.”

“Find out how to *submit a new petition* to the European Parliament.”

I think that I would like to use this website frequently.

STRONGLY DISAGREE  STRONGLY AGREE

I found the website unnecessarily complex.

STRONGLY DISAGREE  STRONGLY AGREE

I thought the website was easy to use.

STRONGLY DISAGREE  STRONGLY AGREE

I thought there was too much inconsistency on the site.

STRONGLY DISAGREE  STRONGLY AGREE

2

## What your system usability scale score means

LESS THAN 50 AND USABILITY NEEDS URGENT WORK

OVER 80 IS IN A GOOD PLACE

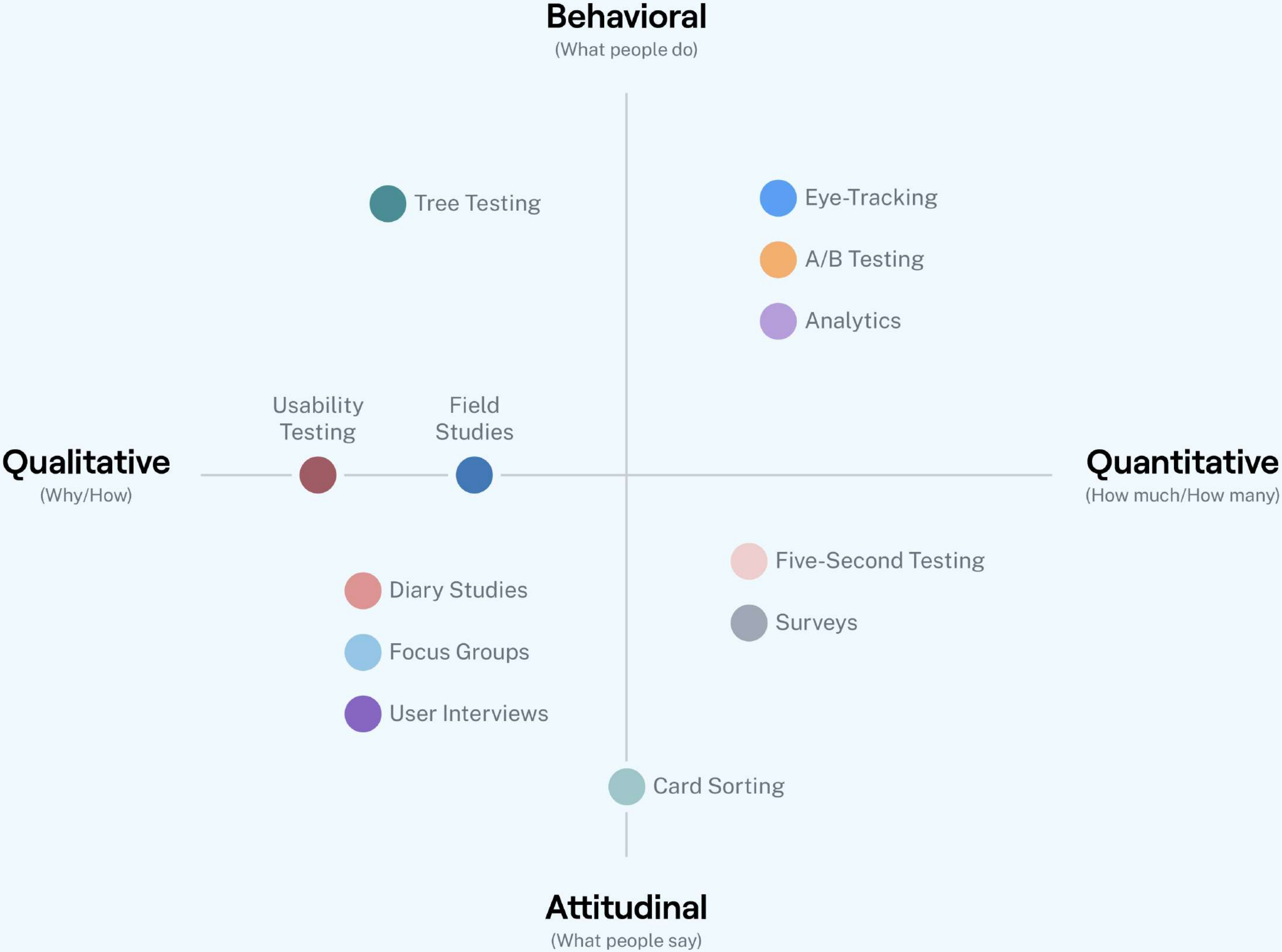


68

AVERAGE SCORE

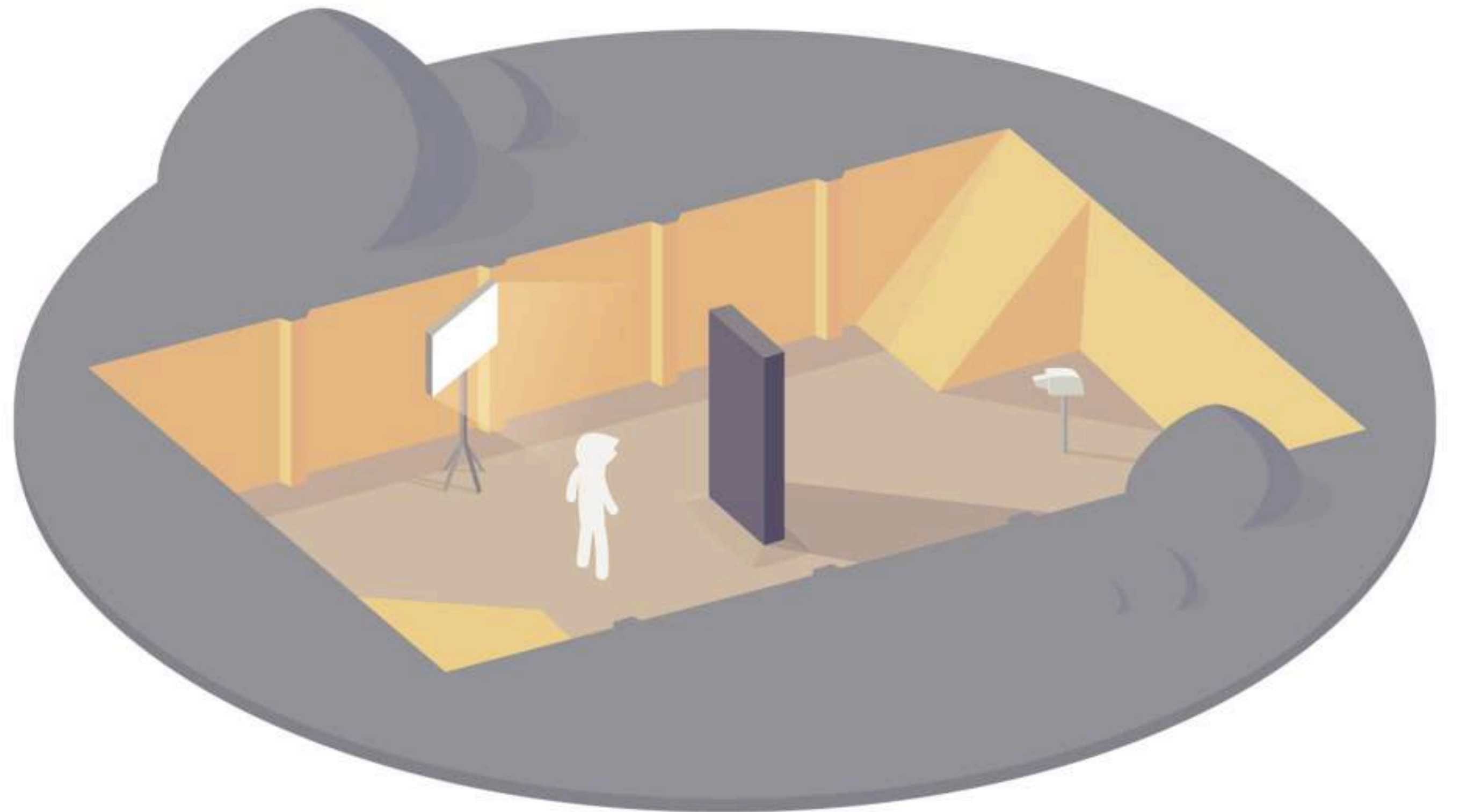
Design KPIs over the last 30 days	#1	#2	#3
Top tasks completion rate	8	7	5
Top tasks completion time	8	7	4
Accuracy of data	9	8	6
Ratio of content @ desktop (1920w)	8	7	7
Ratio of content @ mobile (740w)	7	7	7
Low error frequency	8	6	8
Error recovery rate	9	9	9
Quality of leads	6	4	6
Carbon Footprint Optimization	5	2	1
System Usability Scale Score	8	7	7
Top pages Lighthouse score @ desktop	2	3	4
Top pages Lighthouse score @ mobile	1	2	2
TOTALS	79	69	66
OUT OF	120	120	120

# UX Research Methods



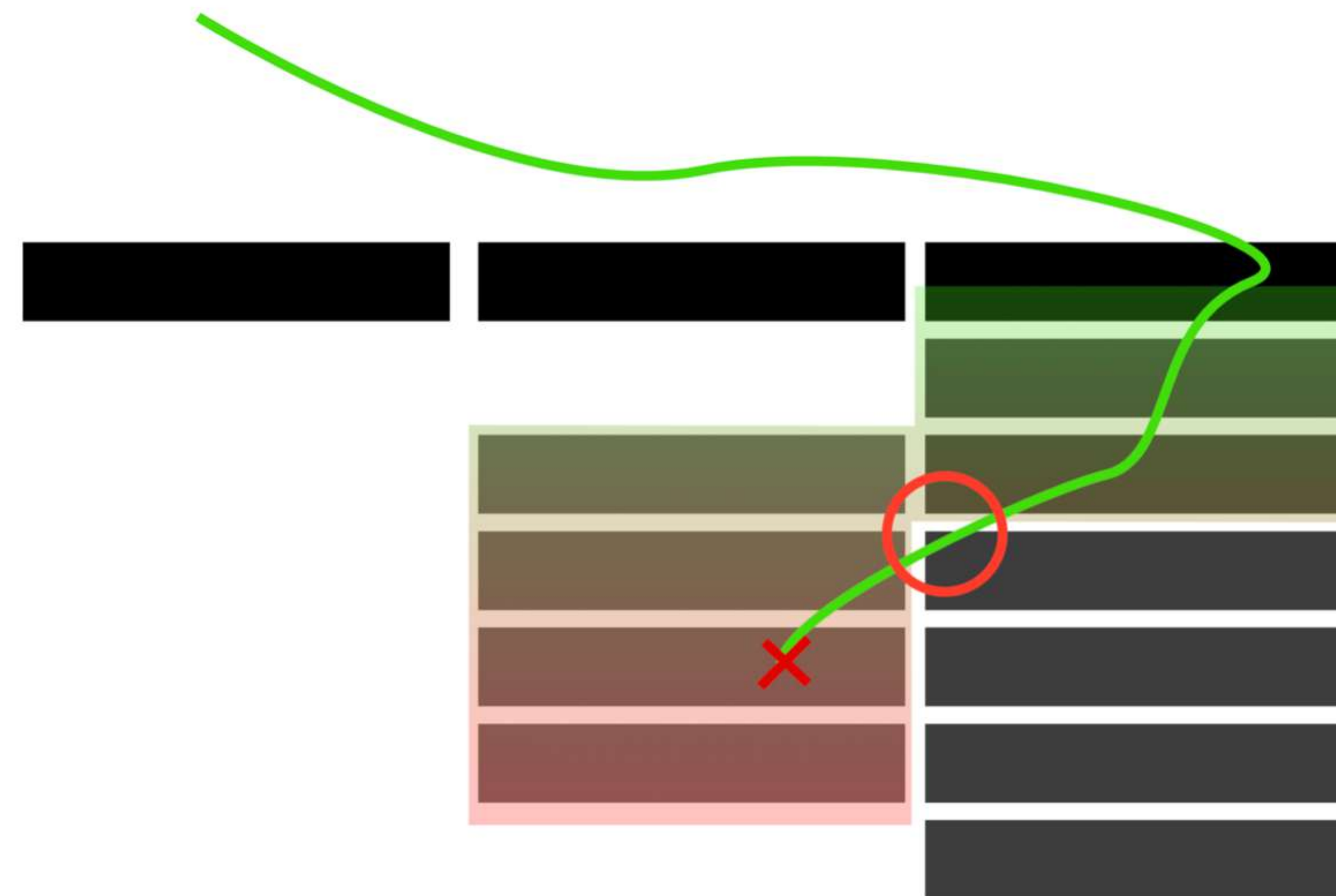
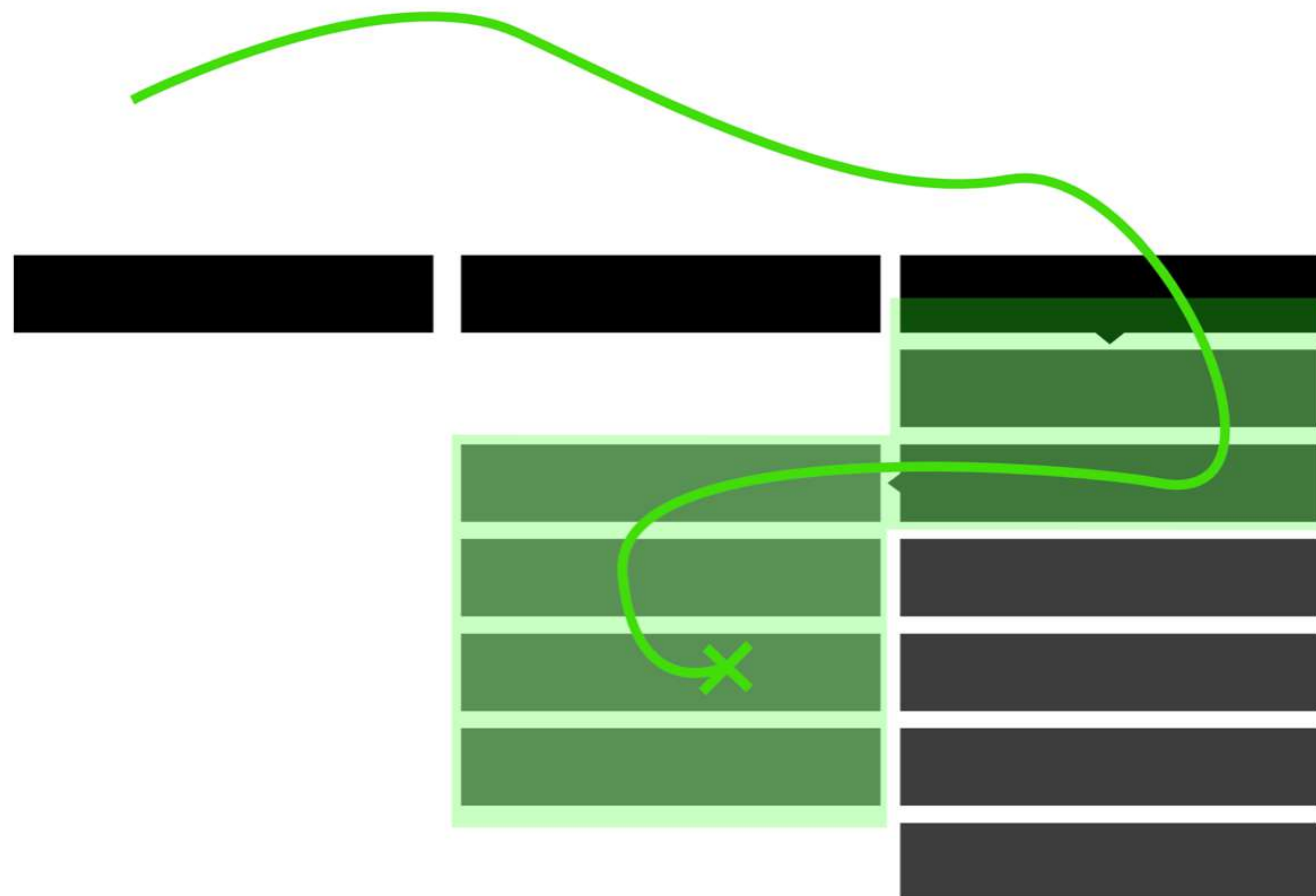
Designing For Complex Systems

# Patterns



# Dealing With Complex Menus

*Mega-sites* are usually *extremely large*, many levels *deep*, are made of many micro-websites and many sub-sections, cater to *many audiences* and have multiple *entry points*.



ECLIPSE Synonyms: 48 Syno X

https://www.thesaurus.com/browse/eclipse

DICTIONARY.COM



THESAURUS.COM

SYNONYMS ▼ eclipse

MEANINGS WORD GAMES LEARN WRITING WORD OF THE DAY

Thesaurus / eclipse

# eclipse



See definition of *eclipse* on Dictionary.com

noun shadowing of the sun

verb **obscure, veil**

verb surpass achievement

OTHER WORDS FOR eclipse

MOST RELEVANT

dim

overshadow

adumbrate

becloud

bedim

cloud

darken

extinguish


murk

shadow

shroud

blot out

See also synonyms for **obscure**



FEEDBACK



Wir sind immer für Dich da. Online, per Click & Meet im Shop und am Telefon. Mehr Infos [hier](#).

Nur bis einschließlich 16. Mai

# 20 % Rabatt auf Mobilfunk-Tarife

Zusammenhalten? War nie so wichtig wie jetzt. Mit dem Code **AKTION20** sparst Du 20 % pro Monat in allen Red- und Young-Tarifen. Together we can.

Zeig mir die Aktion

Mobile, TV, Internet: Swisscom

https://www.swisscom.ch/en/residential.html

Residential customersBusiness customersAbout Swisscomblue News

My SwisscomE-MailmyCloudNetwork & OutagesContactEN

swisscom

MobileInternet & TVDevicesDealsHelp

Search for...

Shopping cart

Notifications


Login

With a new mobile subscription

Get the powerful iPhone 13 for only 99.—


Go to offer

iPhone 13



Epic is the new standard.

SAMSUNG Galaxy S22 Series



650.— discount with subscription and Buyback

Go to offer

Hello, log in now to see your products & data

To the Swisscom login

javascript:void(0);



Privatkunden

0800 4100 280  
Mo bis Fr 8-20 Uhr

Ansprechpartner  
vor Ort finden

Anmelden

Auto, Haus & Recht

Gesundheit & Freizeit

Vorsorge & Vermögen

Beratung

Meine Allianz & Services

SUCHE

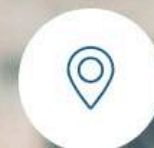
Corona-Pandemie

# Die Allianz ist auch in diesen Zeiten für Sie da

Suchbegriff eingeben ...



Produkt finden



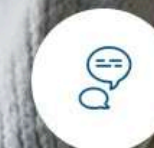
Agentur suchen



Telefonnummer  
finden



Service finden

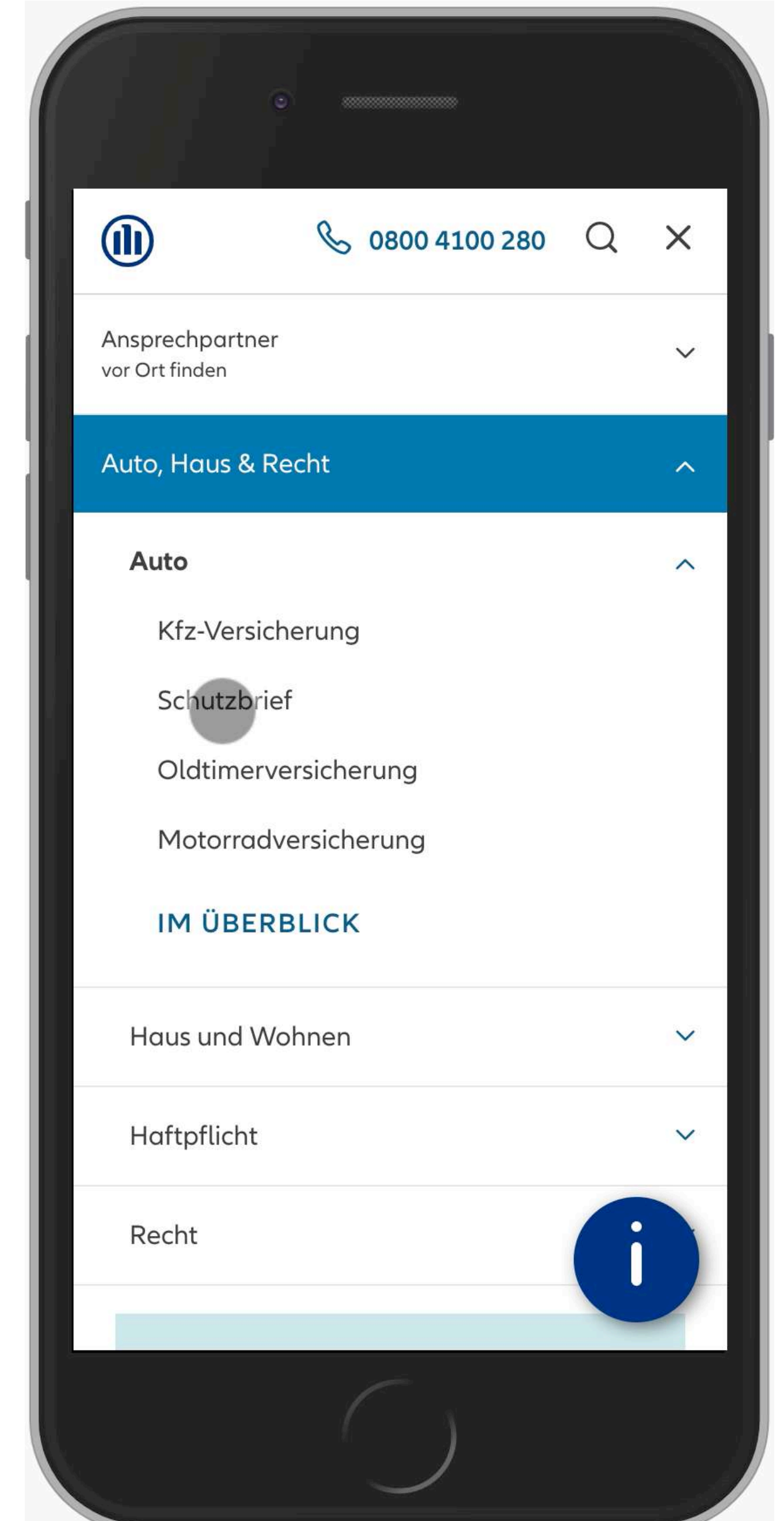
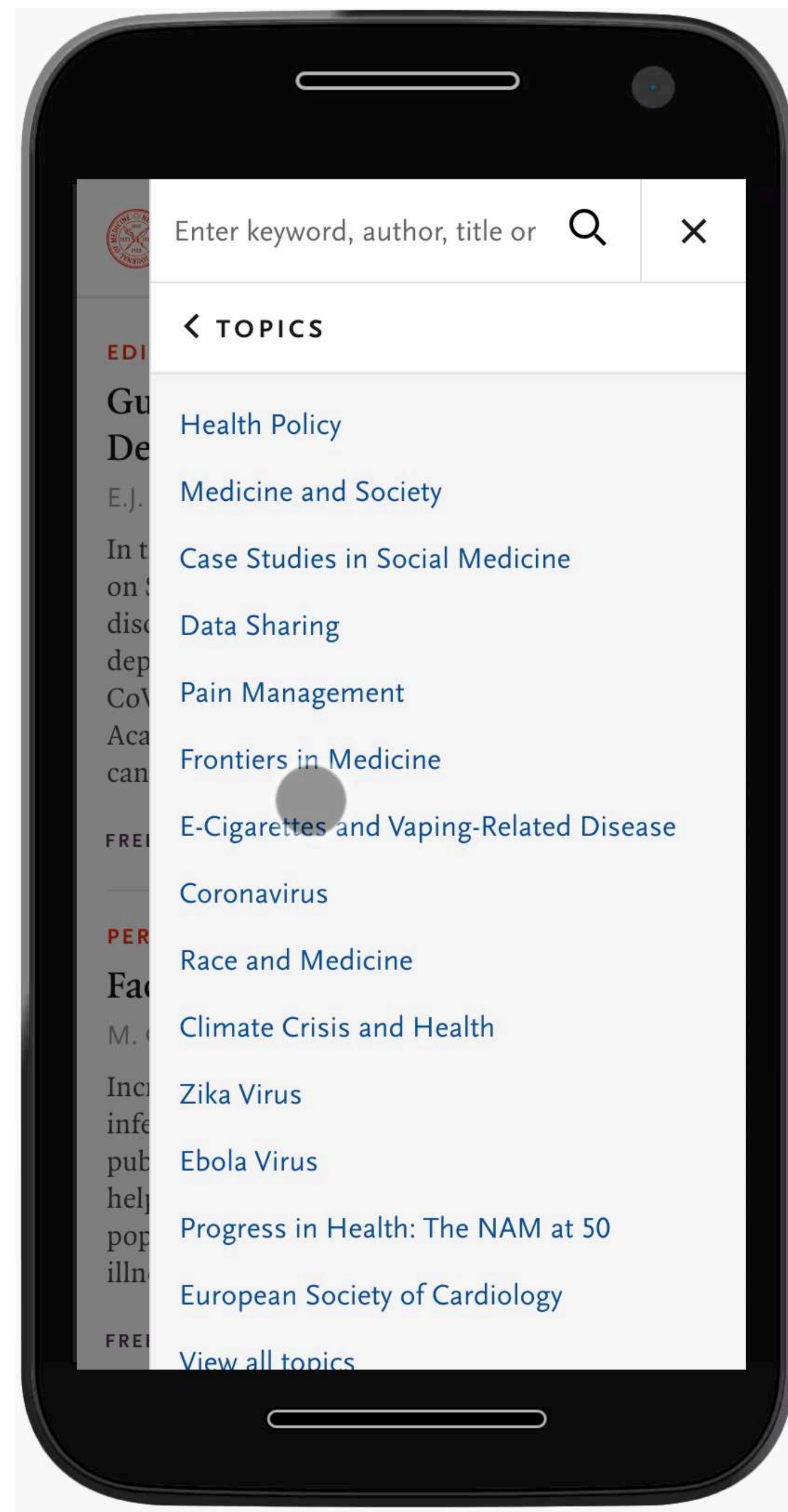
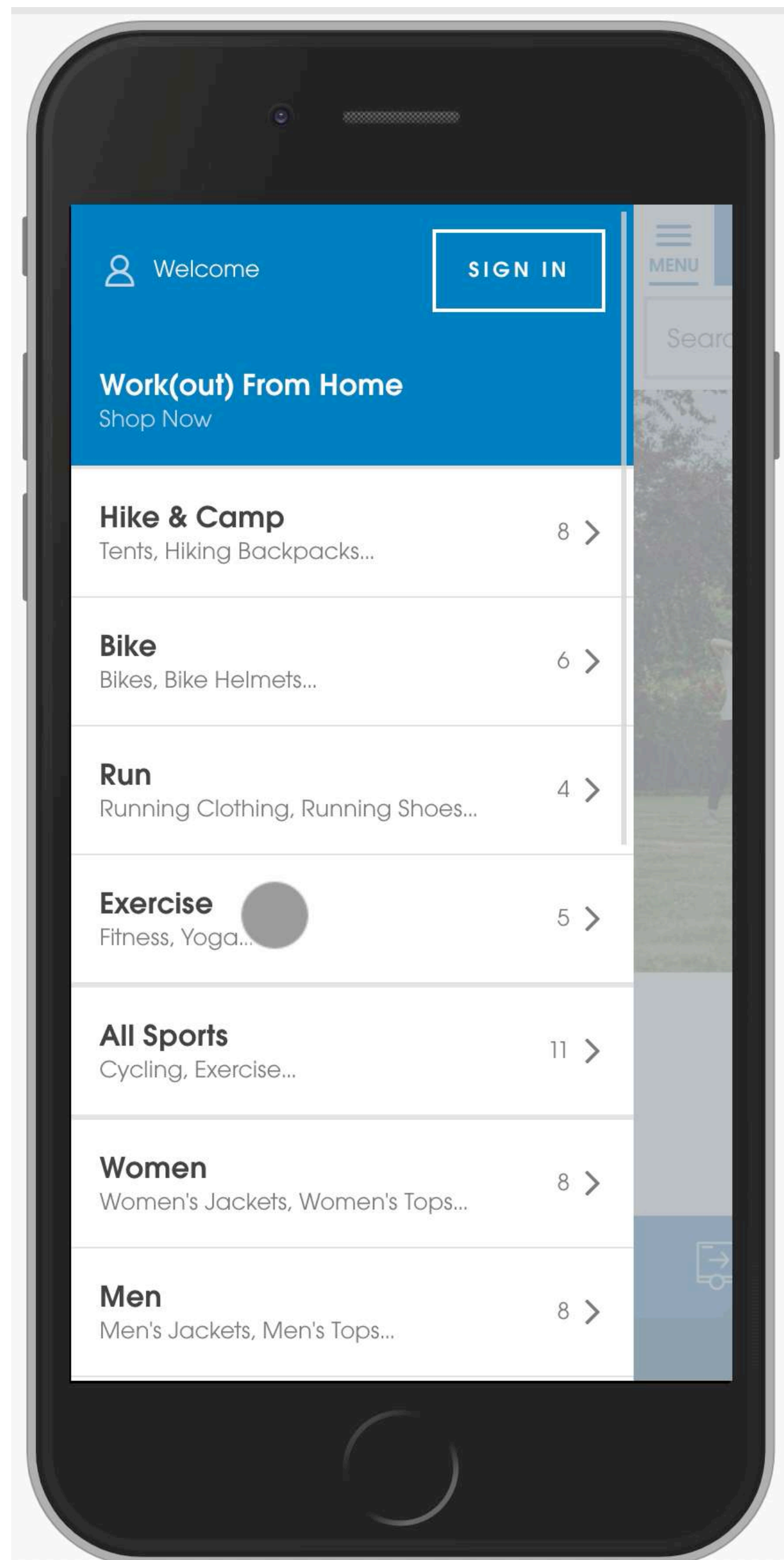


Live-Chat starten

## Aktuelle Informationen zur Corona-Pandemie



✓ Unser Schaden- und Kundenservice ist wie gewohnt erreichbar - telefonisch und digital.



Complex Navigation

# Click-Through Navigation

*Panes* of navigation allow users to *drill-down* into website's categories quickly: from *any page* to any other page.

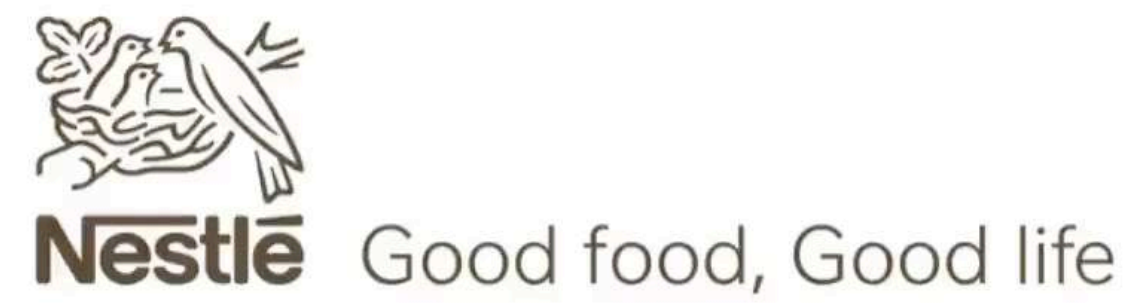


## The euro



On 1 January 1999, 11 countries of the European Union (EU) fixed their exchange rates, adopted a shared monetary policy under the European Central

*The euro brings us*



Search

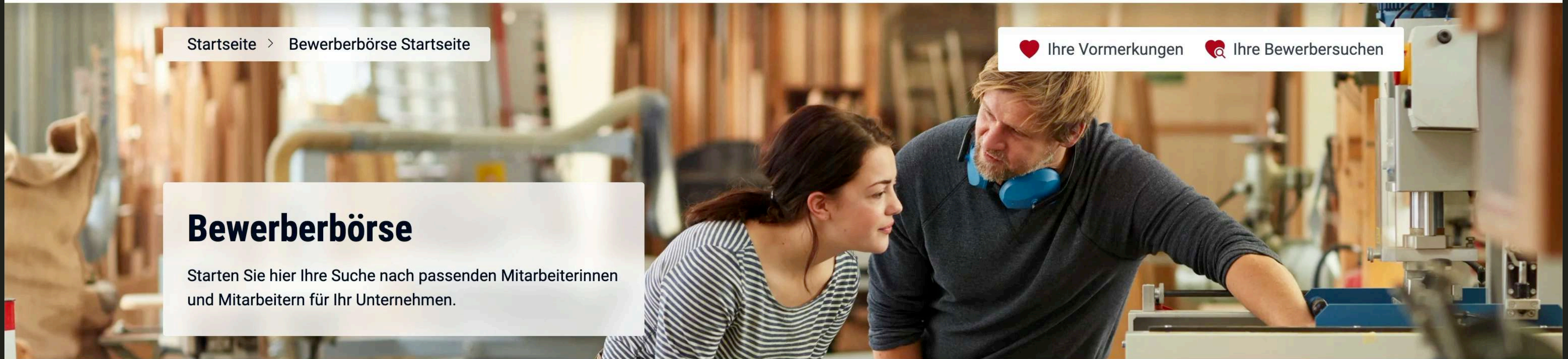
# We are helping to close the living income gap for cocoa-farming communities

Share this page

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Feedback



[Startseite](#) > [Bewerberbörse Startseite](#)

[❤️ Ihre Vormerkungen](#) [❤️🔍 Ihre Bewerbungsuchen](#)

# Bewerberbörse

Starten Sie hier Ihre Suche nach passenden Mitarbeiterinnen und Mitarbeitern für Ihr Unternehmen.

Was suchen Sie? ⓘ

Arbeitskräfte ▼

Beruf, Kenntnisse, Sprachen, Lizenzen, Führersch

Onlineredakteur/in

×

Noch **9 Kriterien** zur Einschränkung der Suche möglich.

Wo suchen Sie?

Ort, PLZ, Bundesland, Land, etc.

— ▼

Umkreis

Suchen

❤️🔍 Suche speichern

- Arbeitszeit ▼
- Berufserfahrung ▼
- Vertragsart ▼
- Behinderung ▼

1.188 Bewerber/innen für <b>Onlineredakteur/in</b>	<b>Beruf &amp; Alternativberuf</b> Onlineredakteur/in Redakteur/in	<b>Arbeitsort</b> 12051 Berlin Umkreis: 50 km
1. Unternehmenskommunikation		

# Sidebar Navigation

One of the most difficult aspects is the *consistency* of how navigation is displayed. Plus, we should minimize the scrolling distance needed to *consume content*.



- Front-page
- Responsibilities ⌵
- Current affairs ⌵
- Entering Finland and travelling** ⌵
- Services and support ⌵
- Ministry ⌵
- Finland abroad ⌵
- Contact information ⌵

Frontpage > Entering Finland and travelling > Entering Finland

FI SV

**Entering Finland and travelling**

**Entering Finland** ⌵

Visa to visit Finland

Residence permits to Finland

Visa representation agreements ⌵

Visa facilitation agreements

Visa requirement and travel documents accepted by Finland

# Entering Finland

Guidance for foreign citizens planning to travel to Finland.

## Entering Finland

Visa to visit Finland

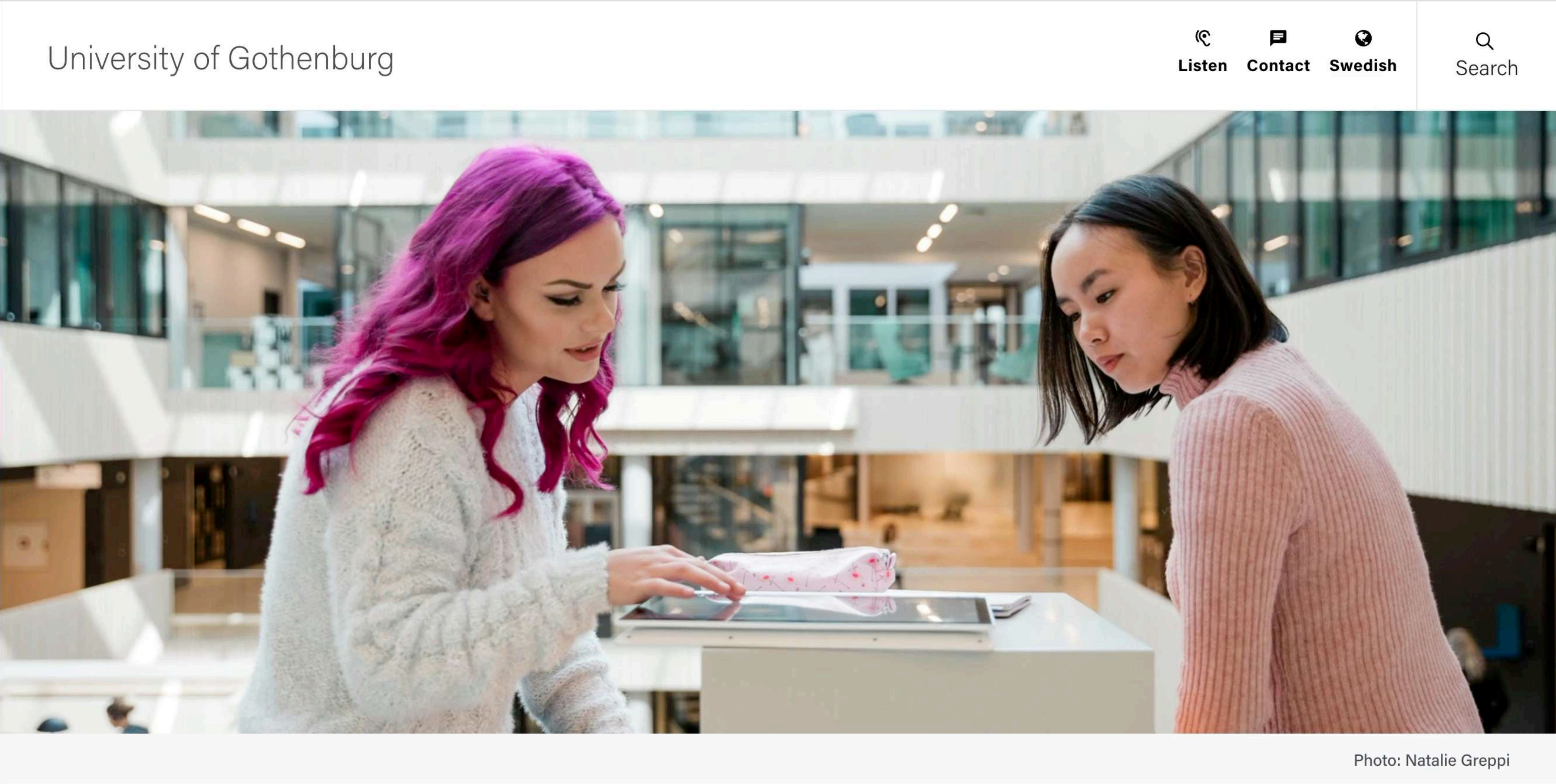
Residence permits to Finland

Visa representation agreements

Visa facilitation agreements

Visa requirement and travel documents accepted by Finland





🏠 / Study in Gothenburg / Apply / **Apply for Master's programme**

Page content

1. Find your programme

2. Check the entry requirements

3. Submit an application

4. Follow your application process

# Apply for Master's programme

Here is a step-by-step guide on how to apply for a Master's programme at the University of Gothenburg. There are a lot of

Contact

**Admissions Office**

+46 31 786 1050  
[admissions@gu.se](mailto:admissions@gu.se)

**Phone hours:** Monday and Wednesday: 9–11 am

https://www.gu.se/en/study-in-gothenburg/apply/apply-for-masters-programme

SA driver's licence renewals - / X

https://auspost.com.au/id-and-document-services/licence-renewals-and-applications/sa-drivers-licence-renewals#tab1

Australia Post

PersonalBusinessEnterprise & Gov


About usHelp & supportLog in

ReceivingSendingMoney & insuranceID & document servicesShopTools

Personal > ID & document services > Licence renewals & applications > SA driver's licence renewals

SA driver's licence renewals

You can now renew your South Australian driver's licence at participating Post Offices across the state.



Licence renewals & applications

SA driver's licence renewals

WA driver & vehicle licences

Northern Territory driver & vehicle services

About SA Driver's Licence RenewalsPricingSupport & FAQs

How to renew your driver's licence

To renew your South Australian driver's licence at a participating Post Office, follow these simple



Studies

Research and innovation

Life and housing

About NTNU

Search...

🔍

Home > Studies > Master's degrees in English

Master's degrees in English

Exchange students

All programmes of study

All courses

Language requirements

Financing

Application

Calendar

Examinations

Insurance

FAQ

Contact

Master's programmes in English

There are three types of English master's degrees offered at NTNU:

International Master's

International master's degrees are programmes taught entirely in English where the student studies for two years at NTNU.

Erasmus+: Erasmus Mundus Master's

A programme where the student takes part of his or her studies at NTNU and part of his or her studies at other partner institutions and is awarded a joint or double degree at the completion of the programme.

Joint Nordic Master's

A programme where the student takes part of his or her studies at NTNU and part of his or her studies at a Nordic partner institution and is awarded a joint or double degree at the completion of the programme.

Continuing education

Open and in-house courses and programmes for continuing education and professional development

Do you have questions about your International Master's Degree application?

Open data, API —

API for the Statistical Database

Key ratios by industry and size class

Open geodata +

Ordering data and statistics +

Statistical software for px files +



# Key ratios by industry and size class

With Statistics Sweden's key ratios, you have the opportunity to compare a company's strengths and weaknesses with an aggregated industry group.

At Statistics Sweden, we calculate 46 different key ratios for 800 different industry groups and the results are presented using median and quartile values.

The key ratios include all limited companies and economic associations that have operated during the reference year, excluding financial companies such as banks, investment and insurance companies. Companies must have a turnover of at least SEK 10 000 to be included in the population for key ratios.

If you are interested in another grouping or forms of special production other

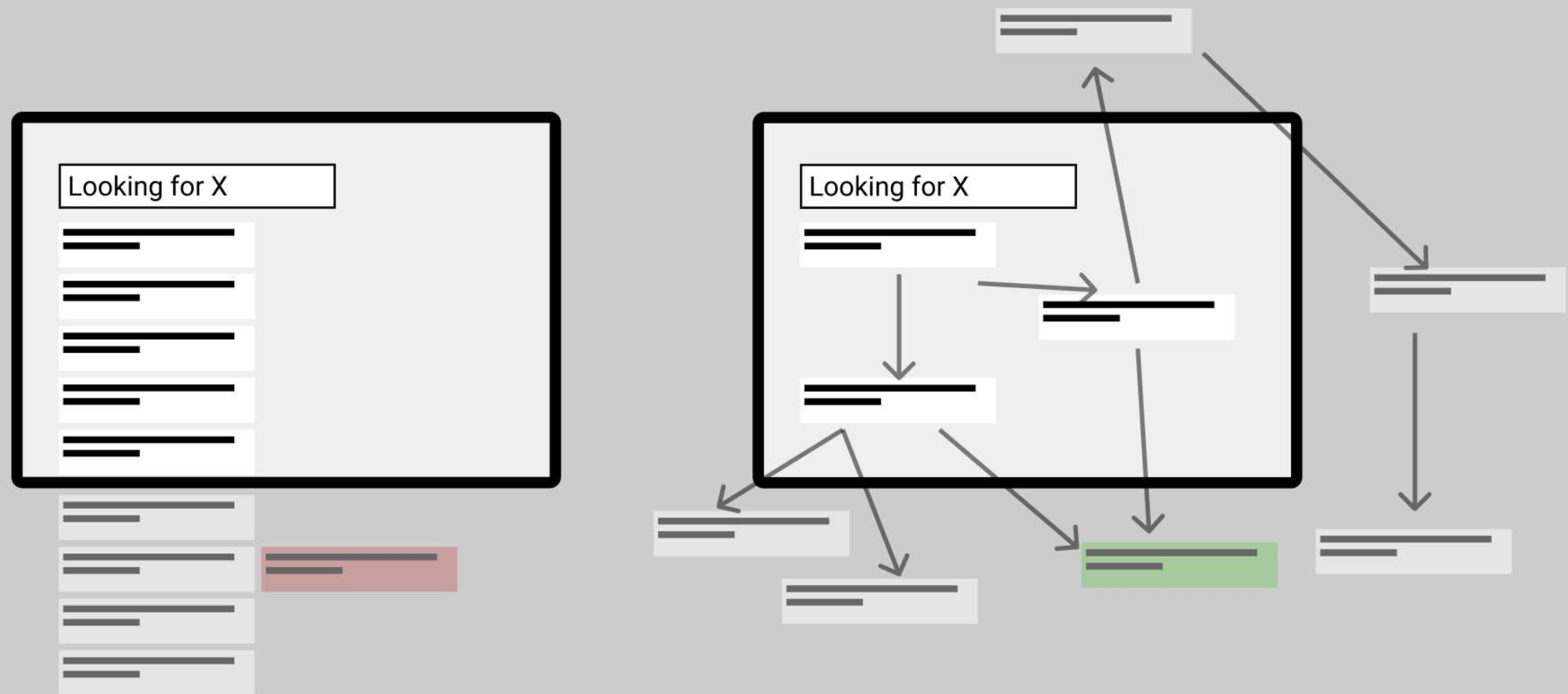
# Navigation Queries

We could give users an option to *construct* their own navigation query with a set of straightforward *selections*.  
An *additional* navigation layer for the *main navigation* and *search*.

# SEARCH

VS

# EXPLORE





Loans for school +

Refinance

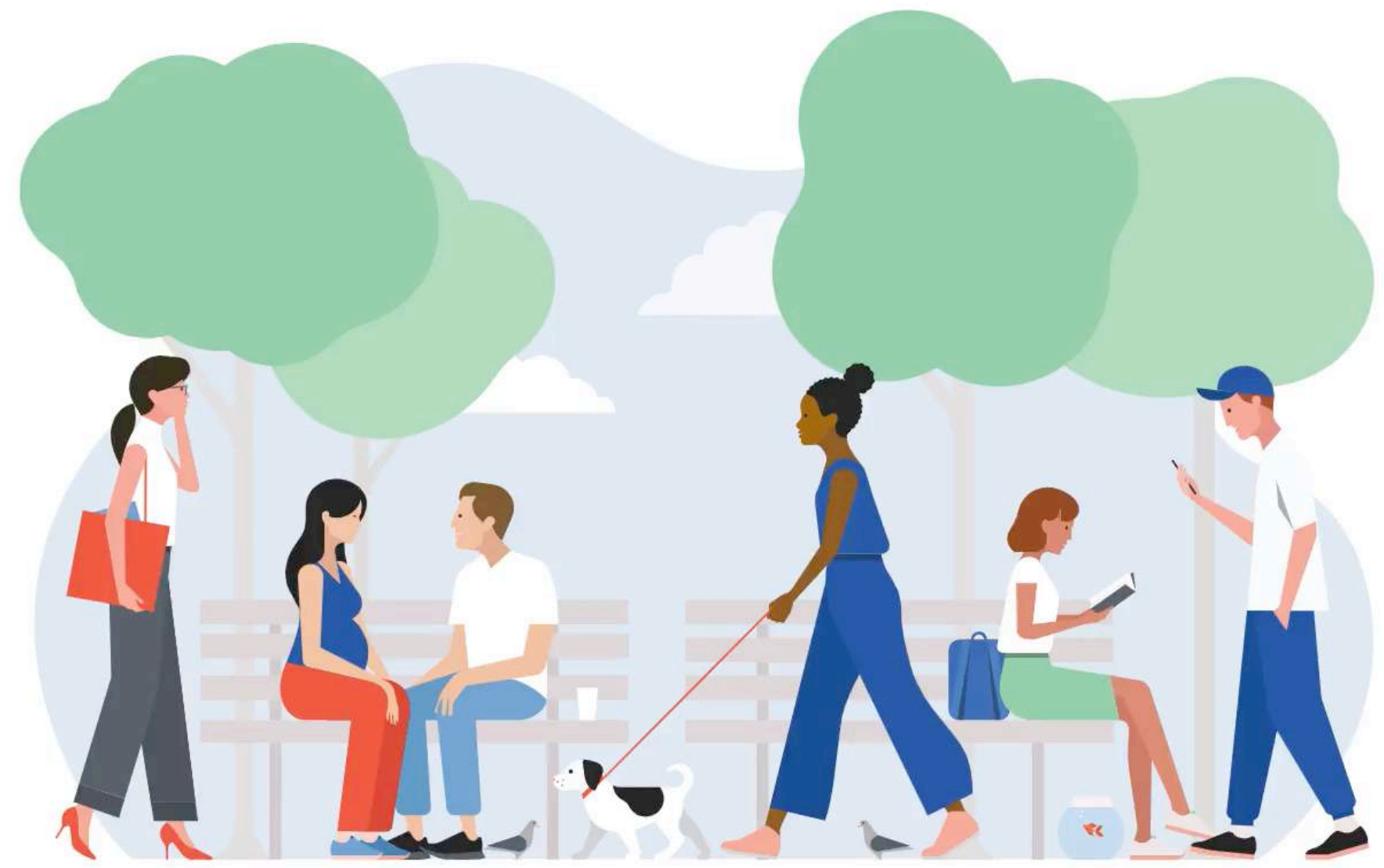
For Business

Learn +

APPLY NOW

SIGN IN

Refinance today to take advantage of historically low rates!

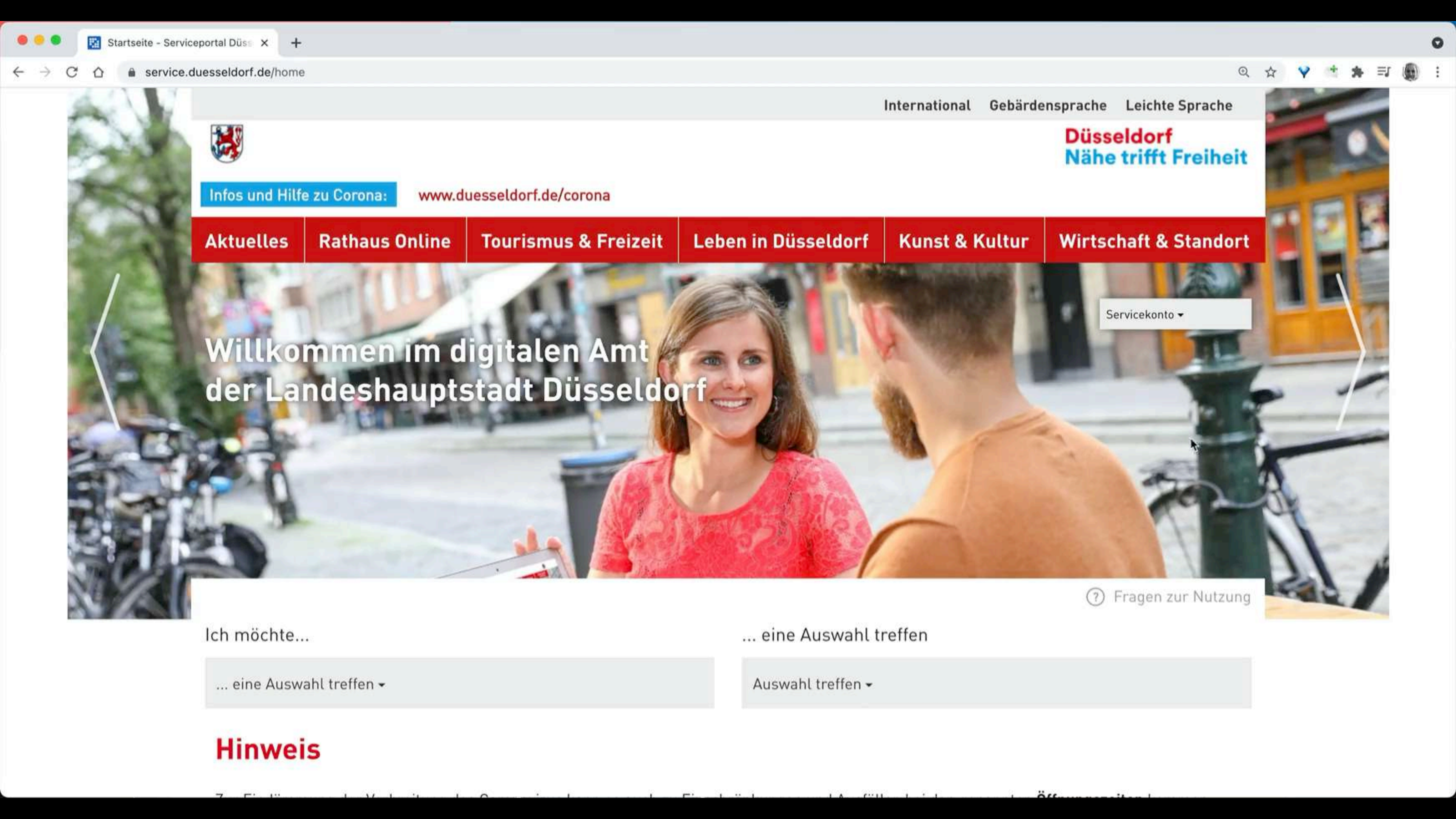


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**Düsseldorf**  
Nähe trifft Freiheit

Infos und Hilfe zu Corona: [www.duesseldorf.de/corona](http://www.duesseldorf.de/corona)

Aktuelles

Rathaus Online

Tourismus & Freizeit

Leben in Düsseldorf

Kunst & Kultur

Wirtschaft & Standort

Servicekonto ▾

Willkommen im digitalen Amt  
der Landeshauptstadt Düsseldorf

ⓘ Fragen zur Nutzung

Ich möchte...

... eine Auswahl treffen

... eine Auswahl treffen ▾

Auswahl treffen ▾

**Hinweis**



Nach Produkt oder Marke suchen



Bestellung verfolgen



Konto



Warenkorb

Haushalt

Waschen & Trocknen

Kühlen & Gefrieren

Geschirrspüler

Kochen & Backen

TV & Audio

Unsere Besten

Angebote

Hilfe & Service



Trusted Shops – sehr gut bewertet



30 Tage Rückgabegarantie  
Stressfrei & kostenlos



AO Lieferversprechen



Shop-Award Gewinner  
Bester Kundenservice



PAYBACK Punkte

Einfach und schnell zum  
Wunschgerät

Wähle eine Geräteart



Preisspanne

2514 Produkte verfügbar

Auswahl zurücksetzen

Auswahl anzeigen

gorenje  
Life Simplified

## Der Farb-Move für deine Küche

Setz coole Akzente  
mit Kühl-Gefrierkombis  
im Retro-Style

Zu den Geräten >



**60 € Rabatt** auf ausgewählte Top-Kühlgeräte ab 599 €

Code: RABATT60



340 € sparen

Für mehr Komfort



Frage uns  
Live Chat

gov.il > Citizenship, documents and passports > Registration and changing personal information > Change your address

# Change your address

Change your registered address on your ID slip online, by post or in person, and get the updated ID slip.

Share:      

לשינוי כתובת

Online application via GovID

## Who can change their address online

You can register a new address online for yourself and your children who are under 18 if you're:

- an Israeli citizen or resident
- and currently in Israel

You can also register a different [address for receiving mail by post](#).

**Note!**  
Before applying online, check below to make sure that you don't need to apply in person

**You always need your ID card when applying in person.**

You'll need to apply in person and submit supporting documents if:

## Population and Immigration Authority

**Piba Central Contact Center**  
**\*3450**

Dial from a landline: 1-222-3450  
Dial from abroad: +972-2-62946666  
Email: [info@piba.gov.il](mailto:info@piba.gov.il)

Call center operating hours:  
[Piba Central Contact Center](#)

[More online services](#)  
[Self service stands](#)  
[Population and Immigration Authority offices](#)  
[Fees and payments](#)

## More on the subject

[Log in](#)[Sign up](#)

**[tag]** search within a tag

**user:1234** search by author

**"words here"** exact phrase

**collective:"Name"** collective  
content

**answers:0** unanswered  
questions

**score:3** posts with a 3+ score

**is:question** type of post

**isaccepted:yes** search within  
status

[Ask a question](#)[Search help](#)



Deposited Jan 14

Now, 9:04 PM

 Search tips

?

amount:<149.99

Create

Help



Show all results for amount:<149.99

	\$5.00 Invoice 9E2AD7C-0044	Succeeded	Jan 28
	\$5.00 Invoice 9E2AD7C-0044	Succeeded	Jan 28
	\$5.00 Invoice F6CB62C9-0010	Succeeded	Jan 28
	\$5.00 Invoice F6CB62C9-0010	Succeeded	Jan 28
	\$9.00 Invoice D9980E1-0051	Succeeded	Jan 28
	\$9.00 Invoice D9980E1-0051	Succeeded	Jan 28
	\$5.00 Invoice CD652C8-0051	Succeeded	Jan 28
	\$5.00 Invoice CD652C8-0051	Succeeded	Jan 28
	\$5.00 Invoice 04DF179-0051	Succeeded	Jan 28
	\$5.00 Invoice 04DF179-0051	Succeeded	Jan 28

Search tips

Developers



Pay out funds

alance

View

080.25

le to pay out

ts

View

000.00

ted Jan 14

overview

Complex Navigation

# Cards Index

Instead of a complex multi-level navigation, consider a simple *index of cards*, with all topics for a section laid out. The navigation might be slower, but it *more accurate*.

Startseite > Außen- und Europapolitik > Themen

# Themen deutscher Außenpolitik

## Grundprinzipien deutscher Außenpolitik

→

Ein souveränes Europa, die transatlantische Partnerschaft, das Engagement für Frieden und Sicherheit, die Förderung von Demokratie und Menschenrechten sowie der Einsatz für den Multilateralismus - das sind die Leitplanken deutscher Außenpolitik.





Search



Health A-Z

Live Well

Care and support

Pregnancy

NHS services

## Coronavirus (COVID-19)

[Get the latest advice about coronavirus](#)

[Home](#) > [Health A to Z](#)

# Social care and support guide

If you or someone you know needs help with day-to-day living because of illness or disability, this website explains your options and where you can get support.

## [Introduction to care and support](#)

A quick guide for people who have care and support needs and their carers.

## [Help from social services and charities](#)

Includes helplines, needs assessments, advocacy and reporting abuse.

## [Care services, equipment and care homes](#)

Includes home adaptations, help at home from a paid carer, staying safe and housing.

## [Money, work and benefits](#)

How to pay for care and support, and where you can get help with costs.

## [Care after a hospital stay](#)

Includes hospital discharge and care and support afterwards.

## [Support and benefits for carers](#)

Includes carer's assessments, support from local councils, respite care and help for young

Welcome to Montréal.ca

# My Neighbourhood. My Services. My City.



## Quick Links

Here are our suggestions to find content quickly and learn about your city.

- [Snow Removal](#)
- [March Break: Things to do](#)
- [Municipal Taxes](#)
- [Statement of Offence](#)
- [Collections](#)
- [Jobs](#)
- [Support for Businesses](#)
- [All Services](#)



**Arts and Sports**

[Heritage and History](#)



**Environment**

[Air](#)



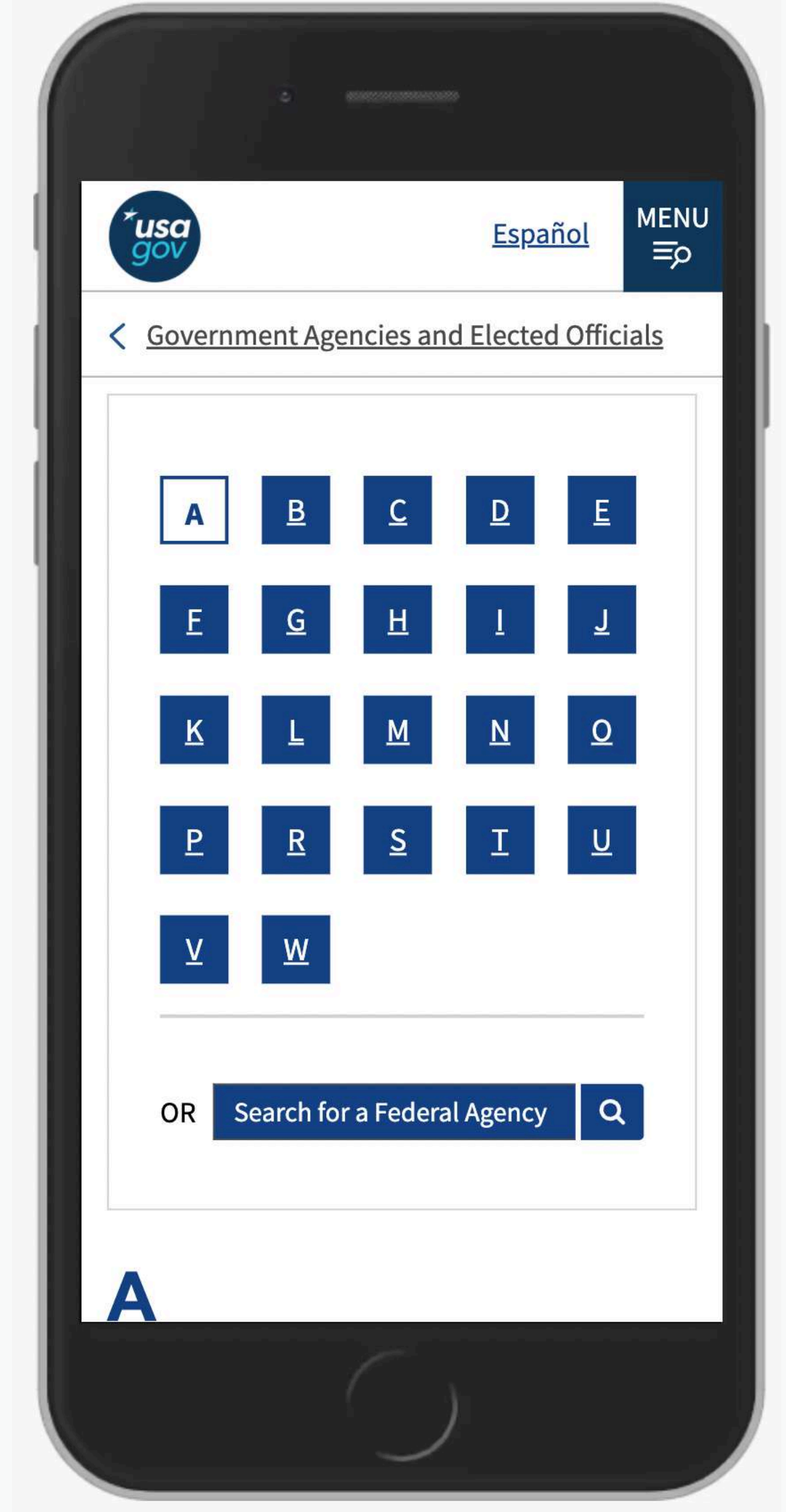
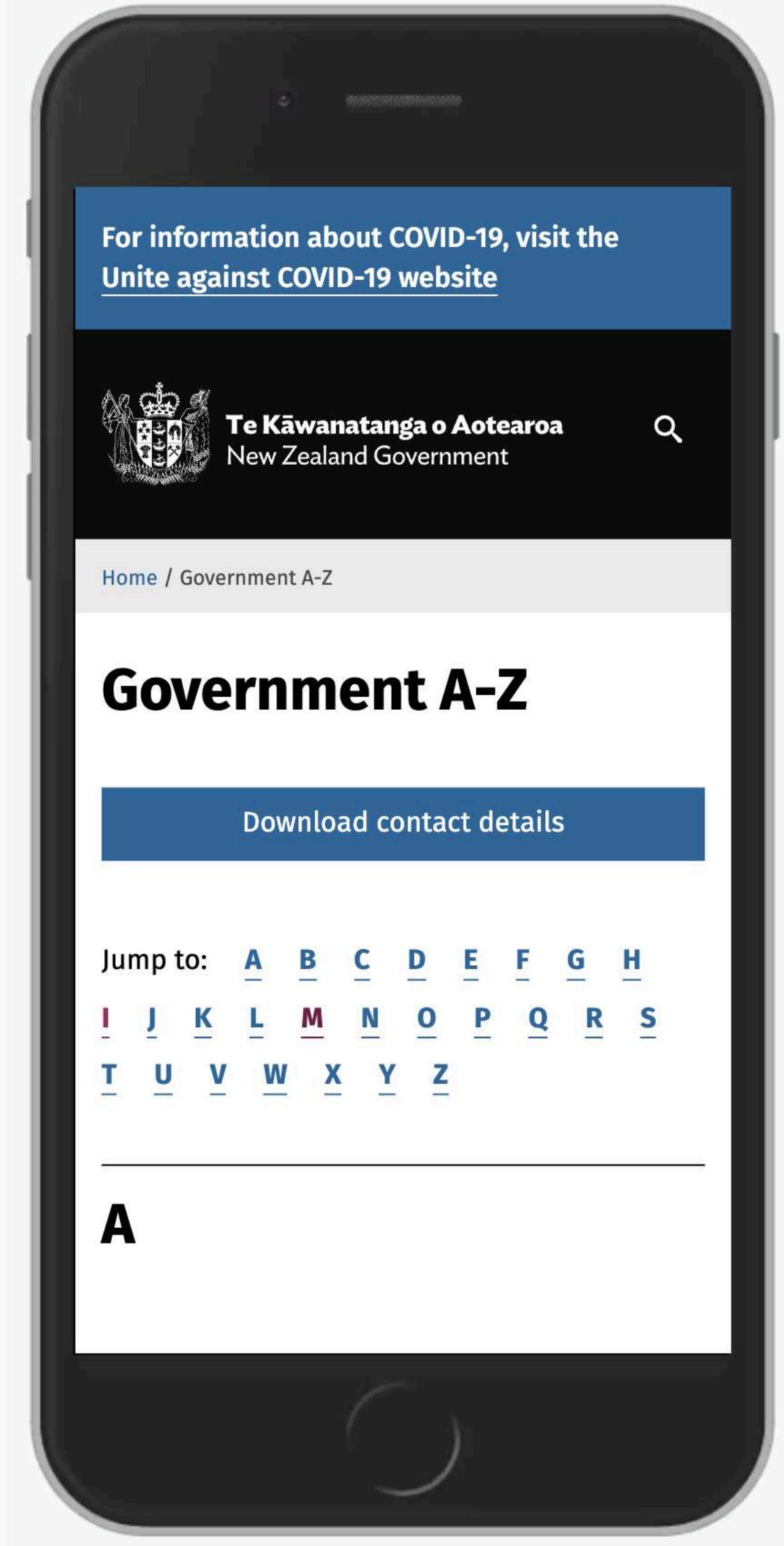
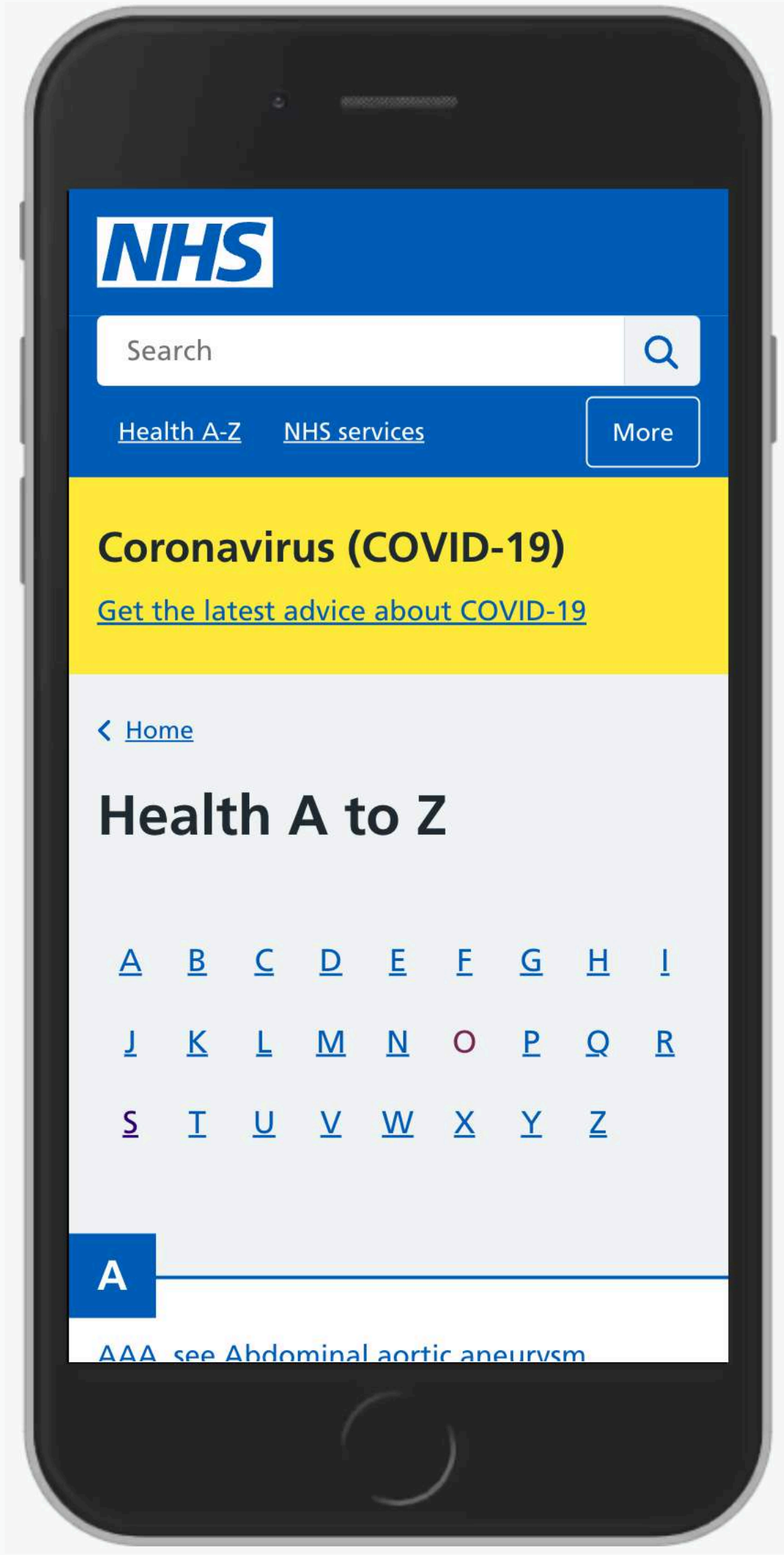
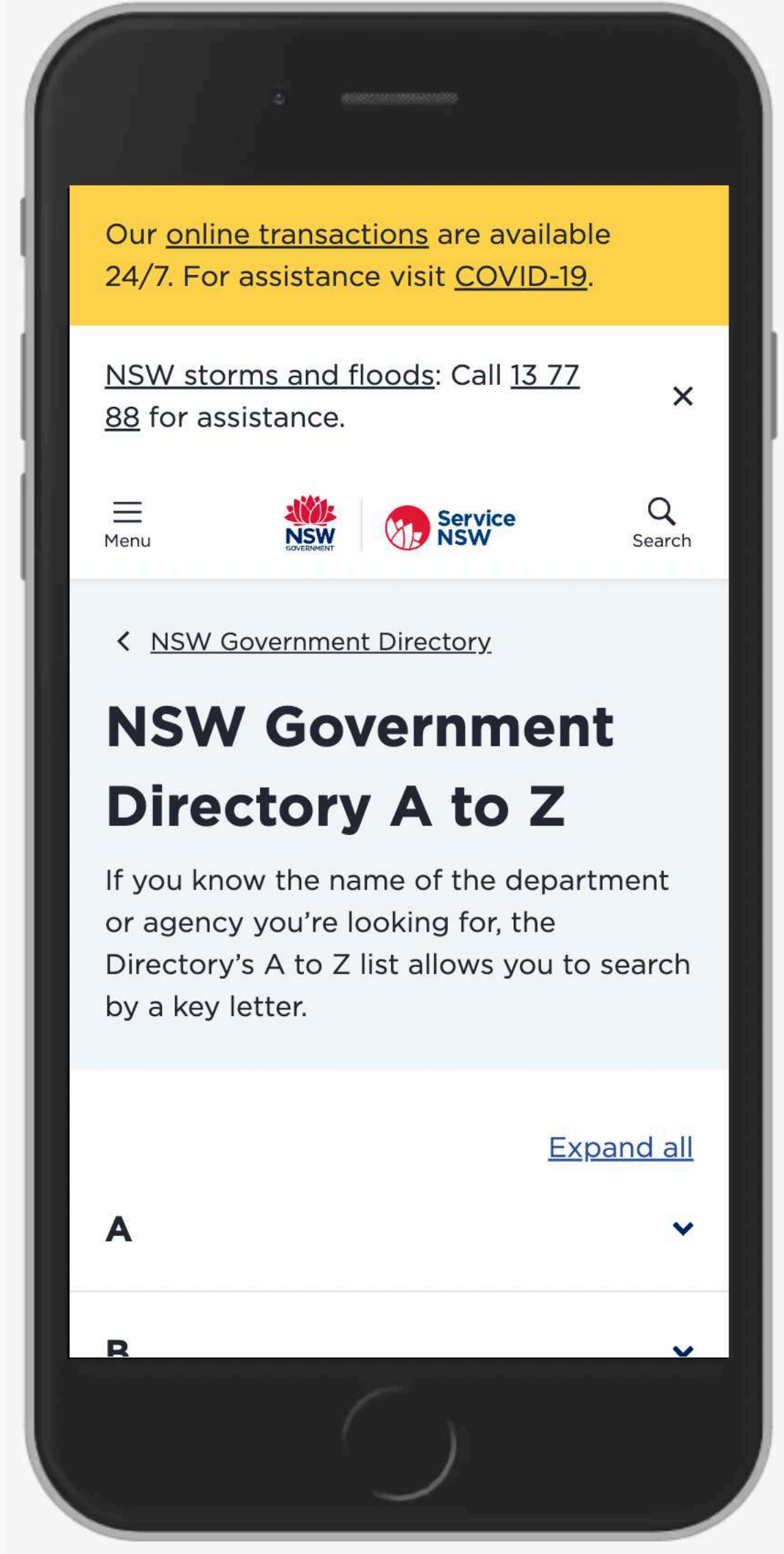
**Maintenance and Traffic**

[Cleanliness](#)

Complex Navigation

# A-Z Pattern

*Often dismissed*, but incredibly useful for complex IA with a lot of content scattered all over the website, and a lot of legacy pages. But: requires precise *labelling*.





# Programmes

Search courses

## Filters

### Language of instruction

- ☐ Taught in Dutch (7)
- ☐ Taught in English (3)

### Disciplines

- ☒ Construction and design (10)
- ☐ Chemistry
- ☐ Economics and management
- ☐ Philosophy
- ☐ Medicines
- ☐ History
- ☐ Harbour and transport

Show more +

### Programme level

- ☐ Bachelor (4)
- ☐ Master (7)

10 results found

Construction and design

Group by: Alfabetically Disciplines Programme level Type of course or training

A

## Architecture

Taught in Dutch

### Programme levels

- Bachelor
- Bridging programme
- Master
- Preparatory programme

### Type of course or training

Academic programme

C

## CityLAB VIII: Creating healthy cities: an integrated approach

Taught in English

### Programme levels

Other

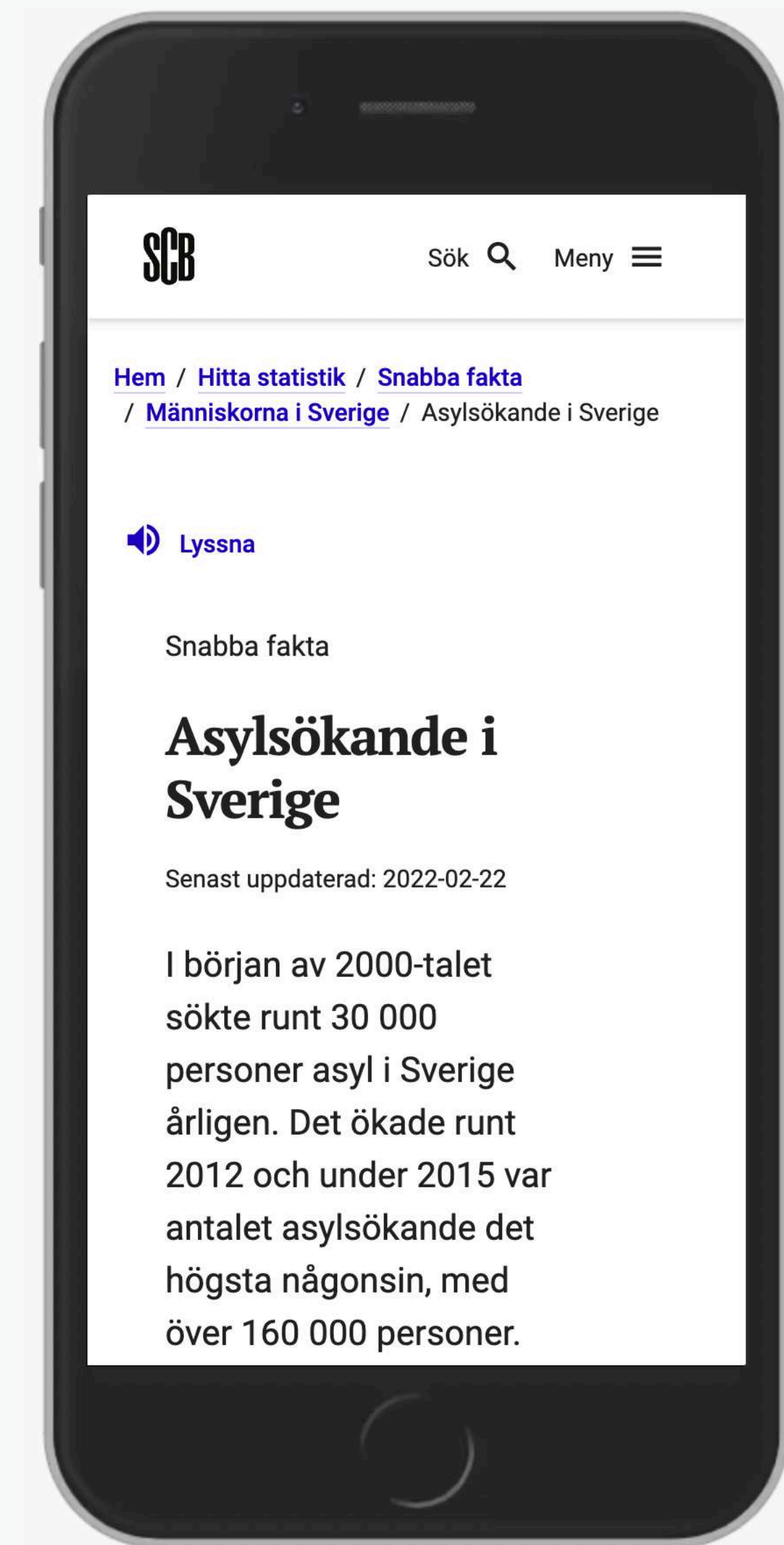
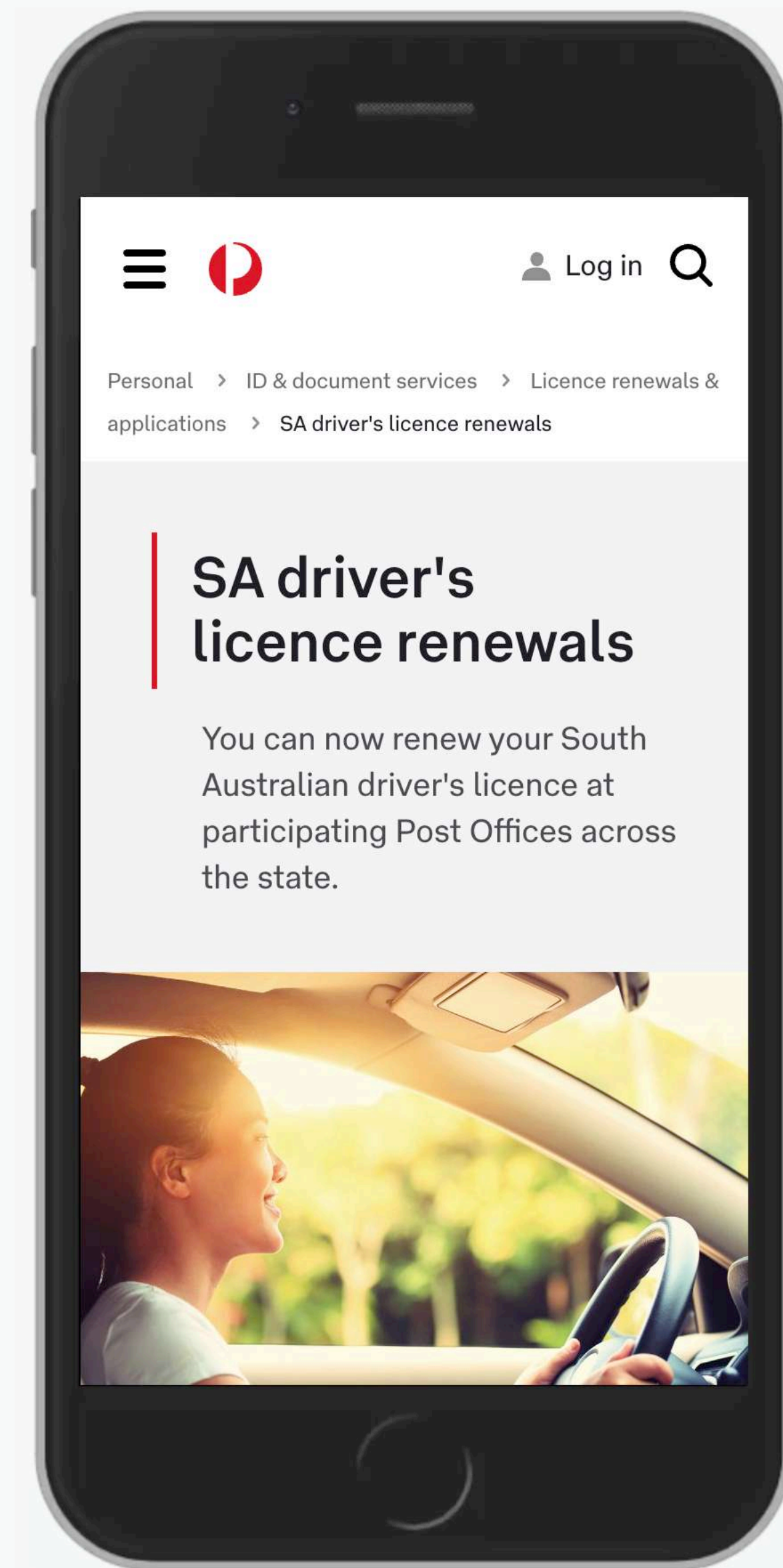
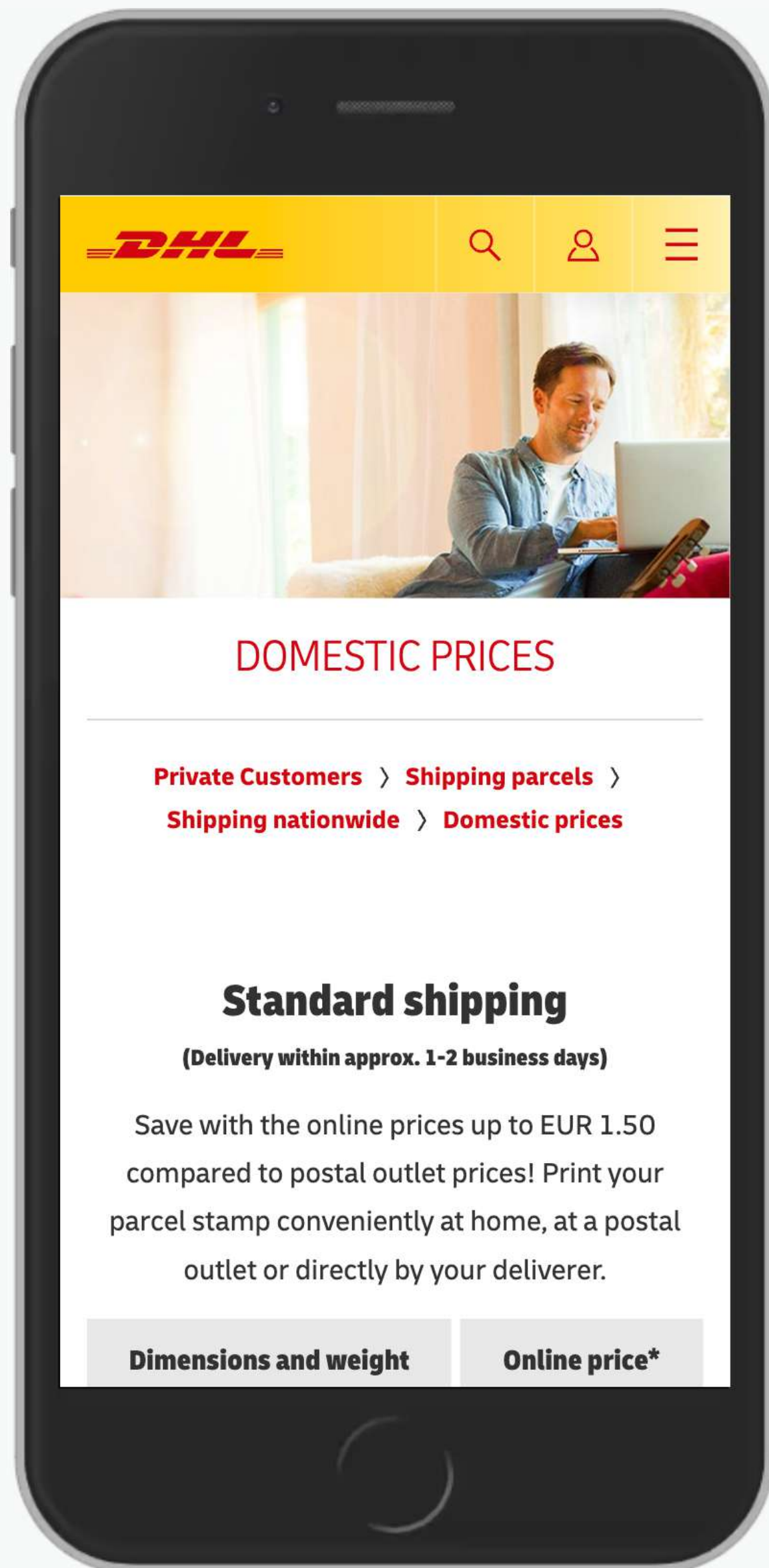
### Type of course or training

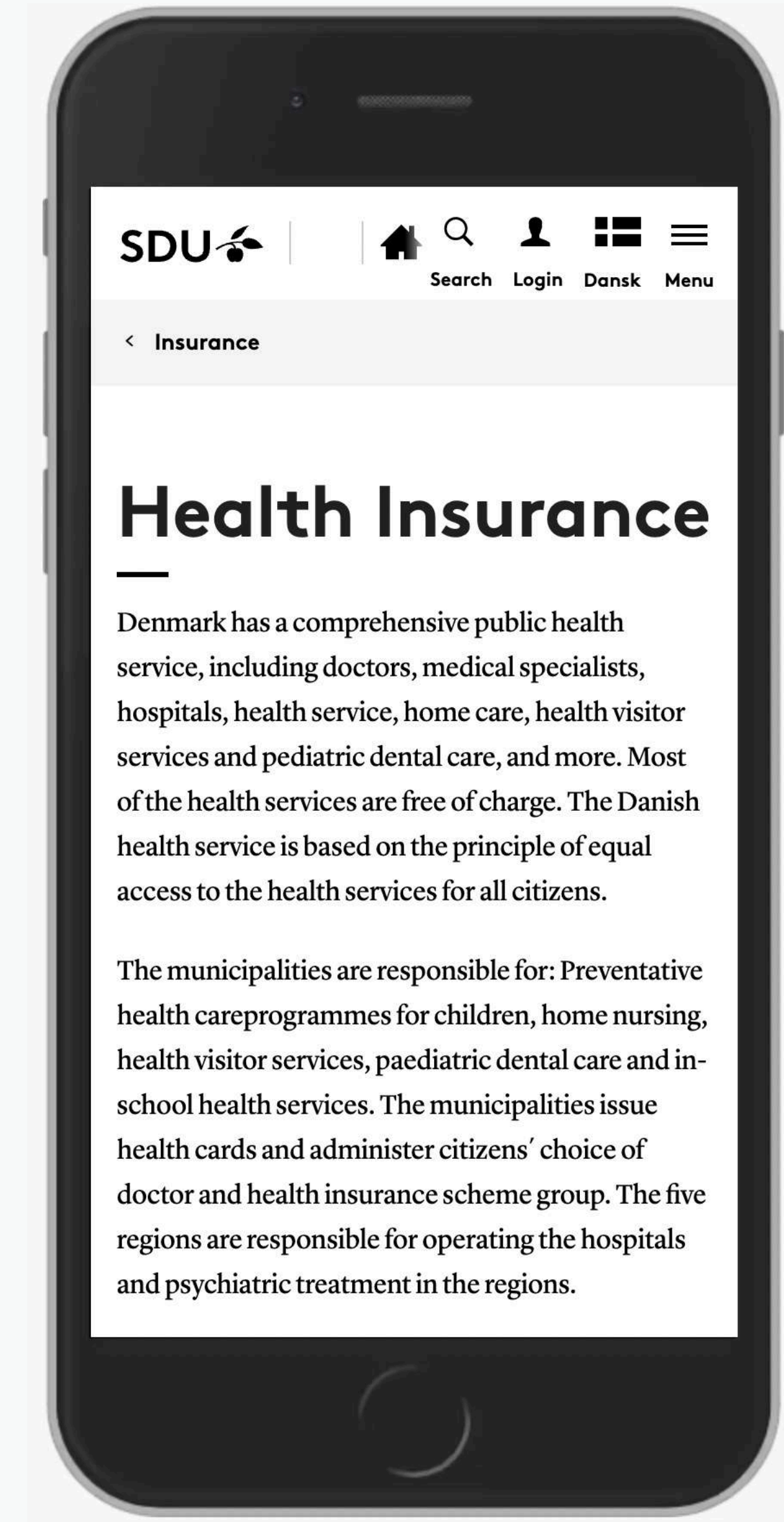
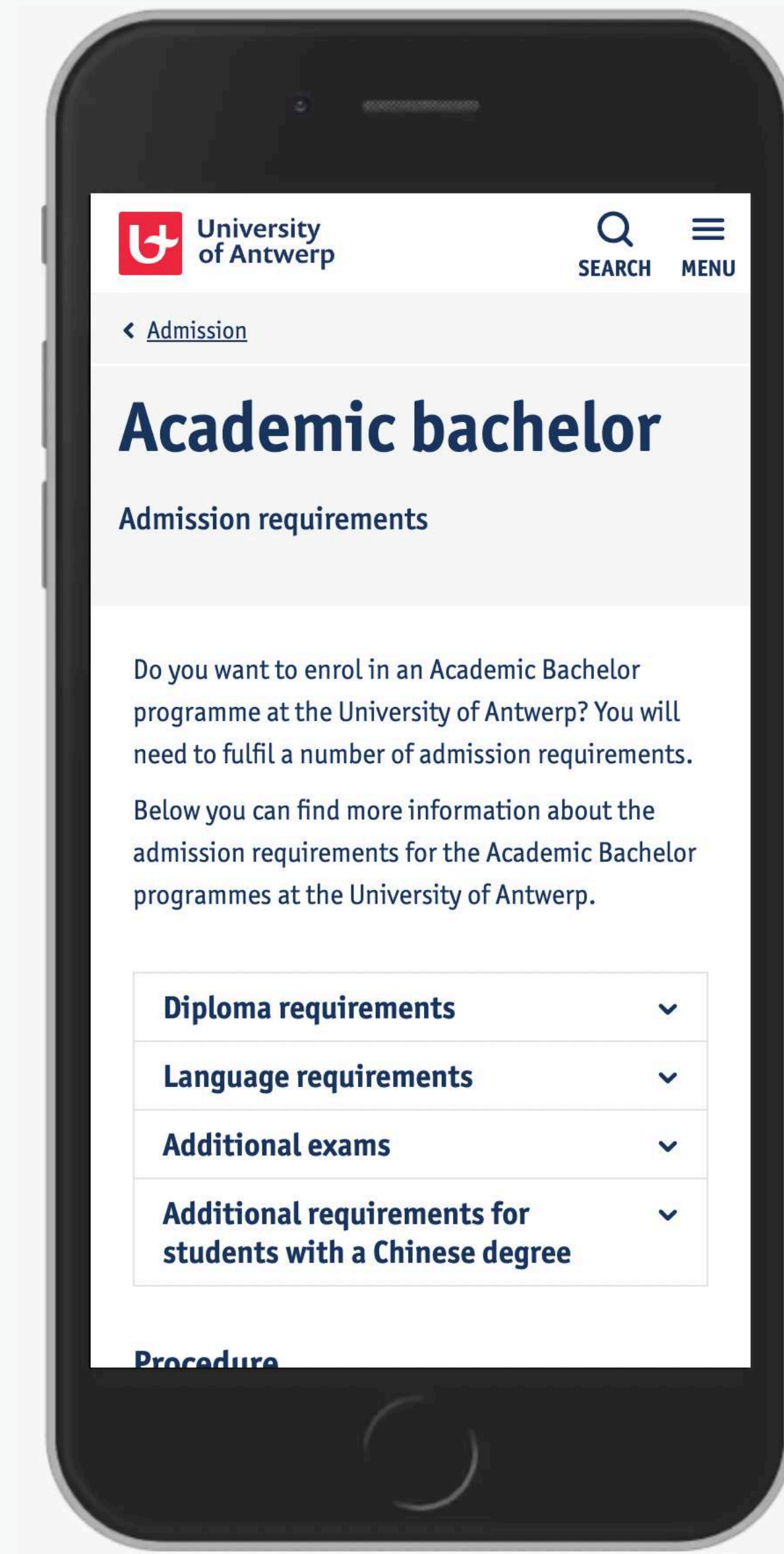
Summer or winter school



# Sideways Breadcrumbs

*An extension* of breadcrumbs, with options to navigate between the siblings of any category on the breadcrumbs path. Very useful, especially for *quick jumps*.





**Info & Hilfe zu Corona:**  
[duesseldorf.de/corona](https://duesseldorf.de/corona)

International Gebärdensprache  
Leichte Sprache



Terminvereinbarung in den Düsseldorfer  
Bürgerbüros

Datenschutzhinweis-Tempus



## in den Düsseldorfer Bürgerbüros

Sämtliche Leistungen der  
Bürgerbüros können nur nach  
vorheriger Terminvereinbarung  
beantragt werden.

**Für die Terminvereinbarung  
haben sie folgende zwei  
Möglichkeiten**



Territory and environment

DE FR IT **EN** RM



Federal Statistical Office



▼ [Sub navigation](#)

◀ [Back](#)

◀ [Look for statistics](#)

**Territory and environment**

[Environmental accounting](#)

▼ [End of page](#)

## Territory and environment



### What's new?

24.02.2022

Territory and environment

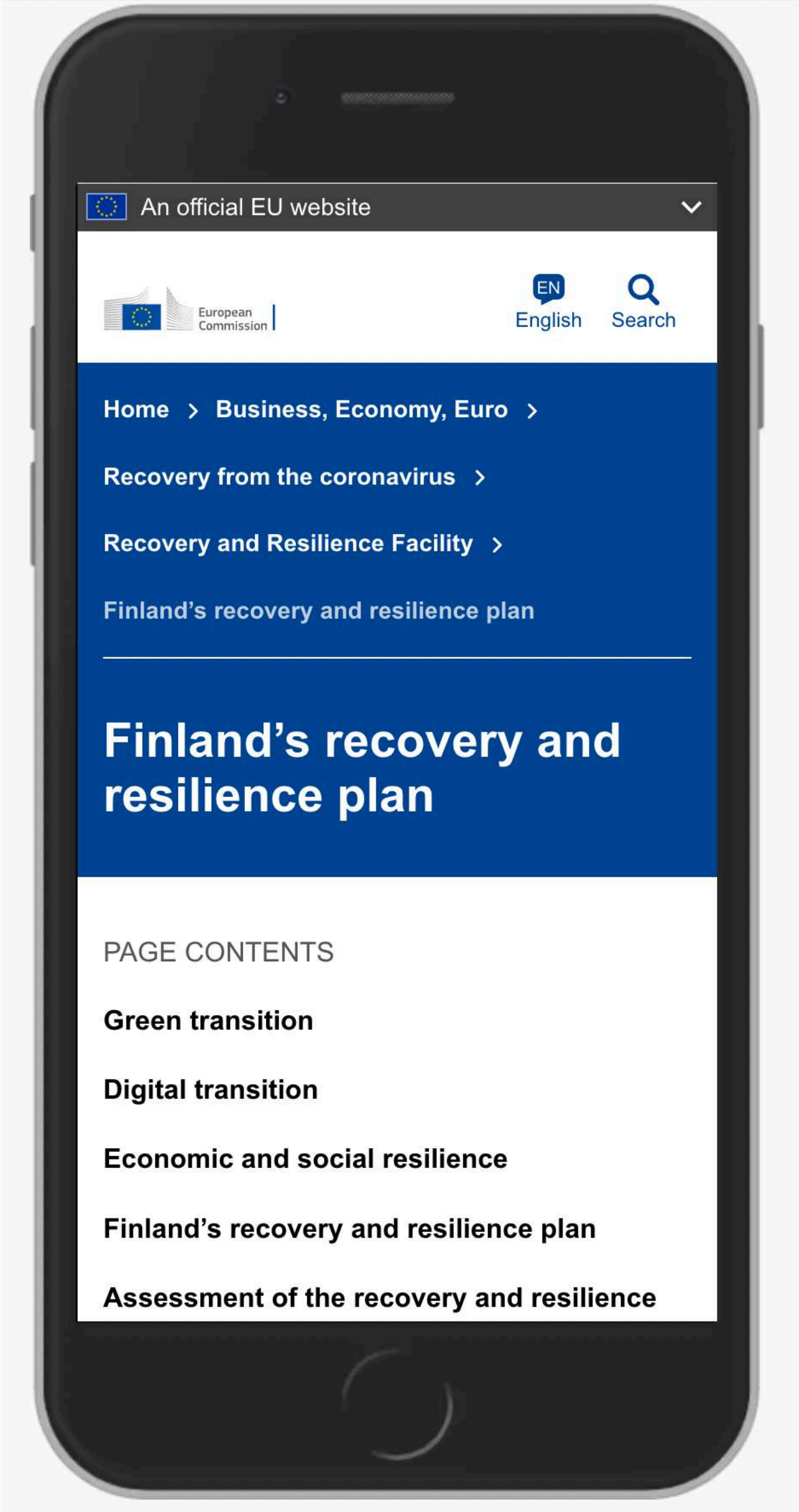
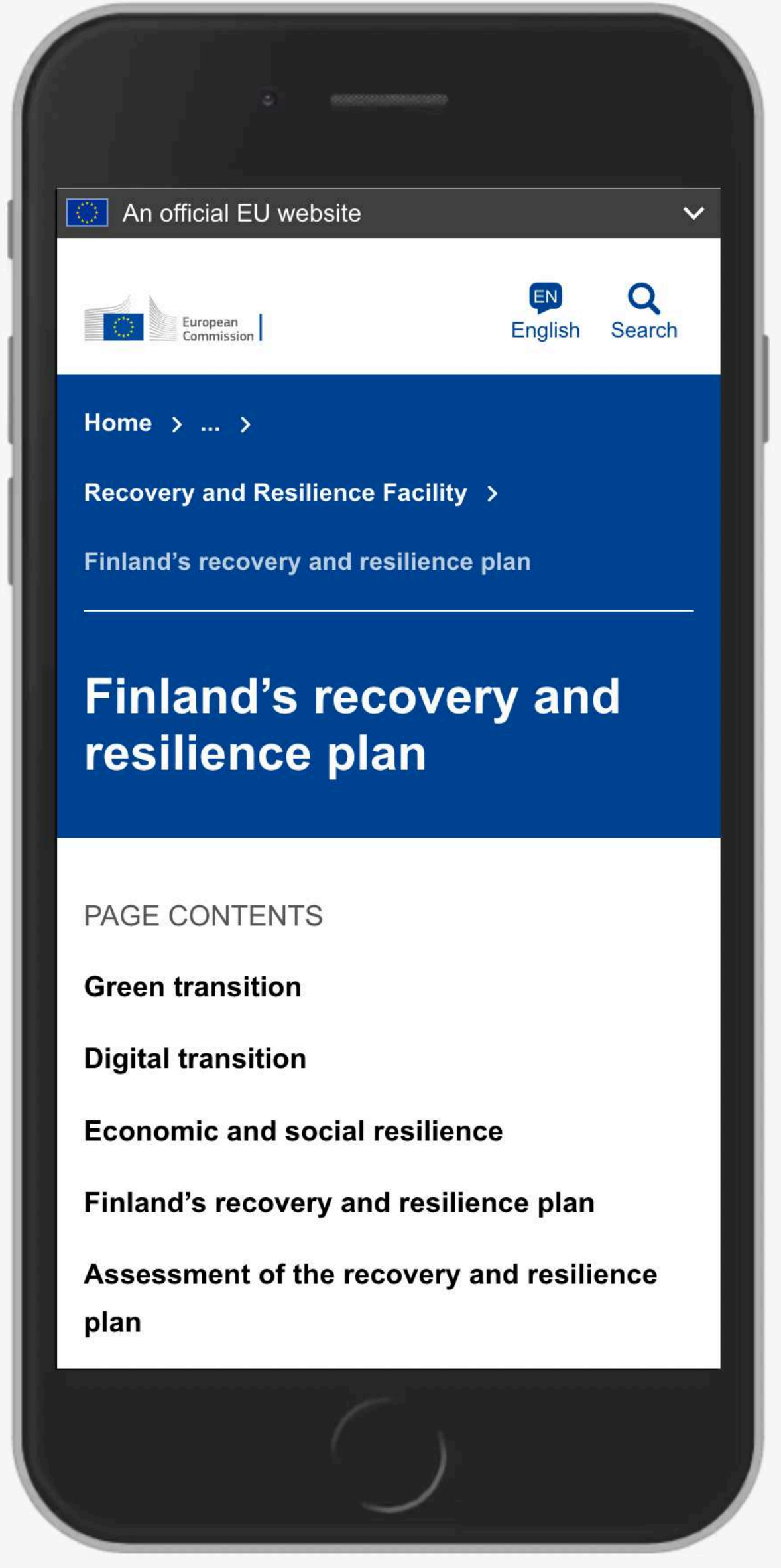
[Households and climate from the perspective of  
environmental accounts](#)

Federal Statistical Office

14.12.2021

Territory and environment

[Environment, energy and climate indicators 2021](#)



## ADAC Rechtsservices

Als Inhaber einer ADAC Rechtsschutzversicherung profitieren Sie von unseren umfangreichen Rechtsservices:  
Nutzen Sie bei Rechtsfragen in den Bereichen Verkehr, Privat, Beruf und Wohnen unsere Beratungsservice - online, telefonisch, per Mail oder per Chat. Außerdem stehen Ihnen wertvolle Online-Dienstleistungen zur Verfügung.

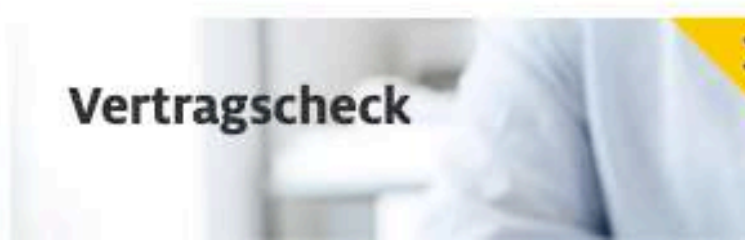
### 📞 Telefonische Erstberatung - Die schnelle Hilfe

Nach Ihrer Identifikation (ADAC Mitglieds- oder Kundennummer) werden Sie sofort an einen unabhängigen Rechtsanwalt zu einer telefonischen Erstberatung weitergeleitet.  
Die telefonische Beratung steht Ihnen täglich, 24 Stunden zur Verfügung.

**(089) 7676 4700**

## Beratung und Service

Lassen Sie sich von fachkundigen Rechtsanwälten beraten.  
Für weitere Informationen und zur Weiterleitung klicken Sie bitte auf das jeweilige Bild.



**Düsseldorf**  
Nähe trifft Freiheit

Infos und Hilfe zu Corona:

[www.duesseldorf.de/corona](https://www.duesseldorf.de/corona)**Aktuelles****Rathaus Online****Tourismus & Freizeit****Leben in Düsseldorf****Kunst & Kultur****Wirtschaft & Standort**

Einwohnermeldeamt &gt;

Terminvereinbarung in den Düsseldorfer Bürgerbüros &gt;

Weitere Themen

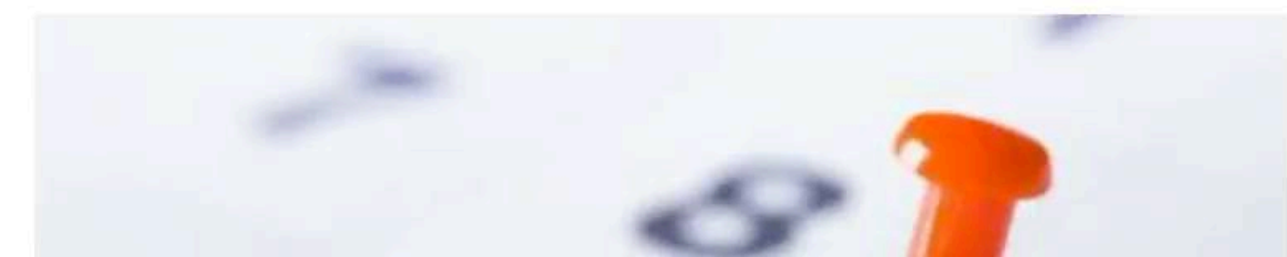
## Terminvereinbarung in den Düsseldorfer Bürgerbüros

Sämtliche Leistungen der Bürgerbüros können nur nach vorheriger Terminvereinbarung beantragt werden.

**Für die Terminvereinbarung haben sie folgende zwei Möglichkeiten:**

- ☐ [Online-Terminvereinbarung](#)
- ☐ [Telefonische Terminvereinbarung](#)

### Online-Terminvereinbarung



Data Science Competence Cen

bfs.admin.ch/bfs/en/home/dscc/dscc.html

Federal Administration

FDHA

FSO

Schweizerische Eidgenossenschaft

Confédération suisse

Confederazione Svizzera

Confederaziun svizra

Federal Statistical Office

Cart

Media

Jobs

Contact

DE

FR

IT

EN

RM

Search...

News

Look for statistics

Services

Basics and Surveys

Registers

National data management NaDB

Data Science Competence Center

The FSO

Federal Statistical Office

Data Science Competence Center

Federal Statistical Office

Data Science Competence Center

Data Science Competence Center (DSCC)

As a service provider, the Data Science Competence Center will provide services within the administration in the field of data science – “Data Science as a Service” (DSaaS).

Our services

We only offer our services to the Swiss public sector and administrations (Confederation, cantons and communes). In this framework, we limit ourselves to the topics of public policy and public governance in Switzerland.

Basic services – S0

Developing quality standards, guidelines on respecting data protection and basic infrastructures (“sandboxes”) for data science applications.

Contact

Federal Statistical Office

Bertrand Loison, Vice Director

Head of Data Science and Statistical Methods Division

Espace de l'Europe 10

CH-2010 Neuchâtel

Switzerland

Tel.

+41 58 463 67 70

Contact

# Dynamic Filters

*Decouple* filters and filtering results to give users a better way to provide *accurate input* and consume results. *Auto-apply* is expected, but it shouldn't block filtering.



Home / Appliances / Refrigerators / French Door Refrigerators

French Door Refrigerators 353 items

sears & marketplace (353)

sears only (234)

In-store: Set Your Location

sort by Recommended

Refine Your Search

Brand

- ☐ Kenmore (30)
- ☐ Kenmore Elite (18)
- ☐ LG (62)
- ☐ Samsung (54)
- ☐ Frigidaire (8)
- ☐ GE (6)

see more

Color Family

- ☐ Stainless steel (103)
- ☐ White (22)
- ☐ Black (16)



~~\$3679.99~~  
**\$2399.99**

Kenmore Elite 72695 29.5 cu. ft. 4-Door Smart French Door Refrigerator -

★★★★☆ (4)

Sold by Sears

☐ add to compare

Extra 10% off with Sears or Shop Your Way card!



~~\$2299.99~~  
**\$1599.99**

Samsung RF27T5201SR/AA 27 cu. ft. French Door Refrigerator - Fingerprint

Sold by Sears

☐ add to compare

Extra 10% off with Sears or Shop Your Way card!



~~\$3199.99~~  
**\$2199.99**

Samsung RF27T5501SR/AA 27 cu. ft. French Door Refrigerator with Family

Sold by Sears

☐ add to compare

Extra 10% off with Sears or Shop Your Way card!



~~\$1939.99~~  
**\$1199.99**

Kenmore 73025 26.1 cu. ft. French Door Refrigerator with Ice Maker -

★★★★☆ (302)

Sold by Sears

☐ add to compare

Extra 10% off with Sears or Shop Your Way card!

Sponsored Products



~~\$413.99~~  
**\$319.95**

avanti Avanti AR4456SS 4.4cu.ft. Counter High Refrigerator - Black and Stainless Steel

Sold by Joes Appliances



Auswärtiges Amt

Suche

Suche schließen

Auswärtiges Amt

Außen- und Europapolitik

Sicher Reisen

Service

Karriere

Neuerscheinungen

Wonach suchen Sie?

Was suchen Sie?

🔍

Häufig gesucht

Ukraine → Spanien → Russland →

Anderungen

INHALT

A-Z

Schlagnote A – Z

1. Abreise

2. Sicherheit

3. Natur und Klima

4. Gesundheit

5. Einreise und Zoll

6. Währung und Preise

7. Verkehrsmittel

8. Reiseversicherung

9. Notfallnummern

10. Weitere Hinweise für Ihre Reise



Stockholm  
University

EDUCATION

RESEARCH

ABOUT THE UNIVERSITY



[Covid-19 – information for students and staff](#)



# Find courses and programmes

Stockholm University

## NOTICE

Please note that, due to the current conditions and responsible authorities' recommendations, most of the university's teaching takes place online. For information about the study form for a specific course – please contact the responsible department. Read more at [su.se/coronavirus](https://su.se/coronavirus)

For study and career counselling, please see [su.se/studycounselling](https://su.se/studycounselling)

Refine

Clear filters

LEVEL



TYPE OF EDUCATION



SEMESTER



STUDY TIME



STUDY FORM



STUDY PACE



Search our courses and programmes...



SHOWING 1-20 OF 777 HITS

**A New Global Food Order? Global/Local Encounters, Contradictions, Tensions and Conflicts, 15 credits**

EH6085

Course, Second level, Economic History



**A Theme from the History of Theoretical Philosophy, 7.5 credits**

FITE10

Course, First level, Philosophy



Trinkflasche

Yoga + Pilates

Verwandte Kategorien

Gesundheitsschuhe

Knowhow [Sport](#)

Und plötzlich **wieder Muskelkater**

Knowhow

Liebe in Zeiten des Internets

353 Produkte

[Superfilter öffnen](#)

Marken



Preis



Angebote



Schuhgrösse (EU)



Zielgruppe



Farbe



Sortierung: Bestseller



Verfügbarkeit: Postversand



Fitnessschuhe



92.60

Puma Hybrid Runner Desert



Fitnessschuhe



70.10

Nike Flex Control Tr4 (44)



Fitnessschuhe



-12%

69.80 statt 79.-

Puma Zone XT Metal  
Trainingsschuh Damen (38)



Fitnessschuhe



Fitnessschuhe



Fitnessschuhe



Galaxus Live

10:13

R. aus Goldau hat sich als **neuer Kunde** registriert

10:13

R. holt **Canon** CL-541/PG-540  
Multipack für **36.80** in unserer  
Filiale in Wohlen ab

10:12

**Soehnle** Comfort 100 für **28.90**  
wurde verschickt an F. aus Islisberg

10:12

**Björn Borg** Scott für **34.-** wurde  
verschickt an M. aus Dietikon

10:12

**Cloer** Waffelautomat für **73.-** wurde

Ähnlich

[Motorradschuhe](#)

Kundenfeedback

Immer ein toller, pragmatischer und  
verständnisvoller Service. Danke an alle! :-)

R. aus Wabern per E-Mail am 21.06.2020

# Task List Pattern

We can *frame* long forms into a *series of tasks* necessary to complete the form. Each task lives on a *separate* page. It makes the process much more *manageable*.

## Application incomplete

You have completed 3 of 8 sections.

### 1. Check before you start

[Check eligibility](#)

COMPLETED

[Read declaration](#)

COMPLETED

### 2. Prepare application

[Company information](#)

COMPLETED

[Your contact details](#)

IN PROGRESS

[List convictions](#)

NOT STARTED

Provide financial evidence

CANNOT START YET

Give medical information

CANNOT START YET

### 3. Apply

Submit and pay

CANNOT START YET

Adam Silver on

# Task List Pattern

For *long-winded forms*, set the *right expectations* early. Before users start, tell them if *a)* they are eligible, *b)* what the process involves, *c)* how long each step takes and *d)* what documents they'll need.

---

Adam Silver, *Gov.uk*

<a href="#">Company information</a>	COMPLETED
<a href="#">Your contact details</a>	IN PROGRESS
<a href="#">List convictions</a>	NOT STARTED
Provide financial evidence	CANNOT START YET
Give medical information	CANNOT START YET

---

# Before you request to go live

---

[Add a team member who can manage settings, team and usage](#)

Completed

[Add content to templates to show the kind of messages you'll send](#)

Completed

[Add an email reply-to address](#)

Not completed

[Change your text message sender name](#)

Not completed

You also need to accept our [terms of use](#).

Continue

[Start a new claim](#)   [Find a claim](#)

Daniel Chambers  
**DD123456X**

UNFINISHED

Task to complete

[Claim details](#)

Enter claim information

<a href="#">Claim details</a>	COMPLETED
<a href="#">Contact details</a>	COMPLETED
<a href="#">Dependent children</a>	COMPLETED
<a href="#">Payment details</a>	COMPLETED

Verify evidence

<a href="#">Death</a>	COMPLETED
<a href="#">Marriage or civil partnership</a>	NOT COMPLETE
<a href="#">National Insurance contributions</a>	COMPLETED

Claim history

- Relationship status checked

Proof of marriage or civil partnership needed

by Chris Jones

12 February 2018
- Contributions verified

by Chris Jones

12 February 2018
- Death verified

by Chris Jones

12 February 2018
- Relationship status checked

Proof of marriage or civil partnership needed

by Alice Timmins

30 January 2018
- Payment details entered

by Alice Timmins

30 January 2018
- Contact details entered

by Alice Timmins

30 January 2018
- Claim details entered

by Alice Timmins

30 January 2018
- Claim started

by Alice Timmins

30 January 2018

BETA

This is a new service – your [feedback \(opens in a new window\)](#) will help us to improve it.

# Make a money claim

## Application incomplete

You have completed 0 of 7 sections

After you have completed all the actions you will be taken to a page where you can check your answers before submitting.

### 1. Consider other options

[Resolving this dispute](#)

INCOMPLETE

### 2. Prepare your claim

[Completing your claim](#)

INCOMPLETE

[Your details](#)

INCOMPLETE

# Routing (Conditional Reveal)

Explore how you can *branch* input to eliminate unnecessary or redundant input. Ask *branching questions first*.  
For the rest, word, group, order, lay out.

## Reasons for rejecting this application

This feedback will be sent to the candidate.

**Was it related to the candidate's behaviour?**

- ☒ Yes
- ☐ No

**Was it related to the quality of their application?**

- ☐ Yes
- ☐ No

**Was it related to qualifications?**

- ☐ Yes
- ☐ No

**Was it related to their performance at interview?**

- ☐ Yes
- ☐ No

## Reasons for rejecting this application

This feedback will be sent to the candidate.

### Was it related to the candidate's behaviour?



Yes

#### What did the candidate do?

☐

Did not reply to messages

☐

Did not attend interview

☐

Other



No

### Was it related to the quality of their application?



Yes



No

## Was it related to the quality of their application?

☒

Yes

Which parts of the application needed improvement?

☒

Personal statement

What could they do to improve?

You have 100 words remaining

☐

Subject knowledge

☐

Other

☐

No

# Reasons for rejecting this application

This feedback will be sent to the candidate.

## Was it related to the candidate's behaviour?



Yes

### What did the candidate do?



Did not reply to messages



Did not attend interview



Other

Give details

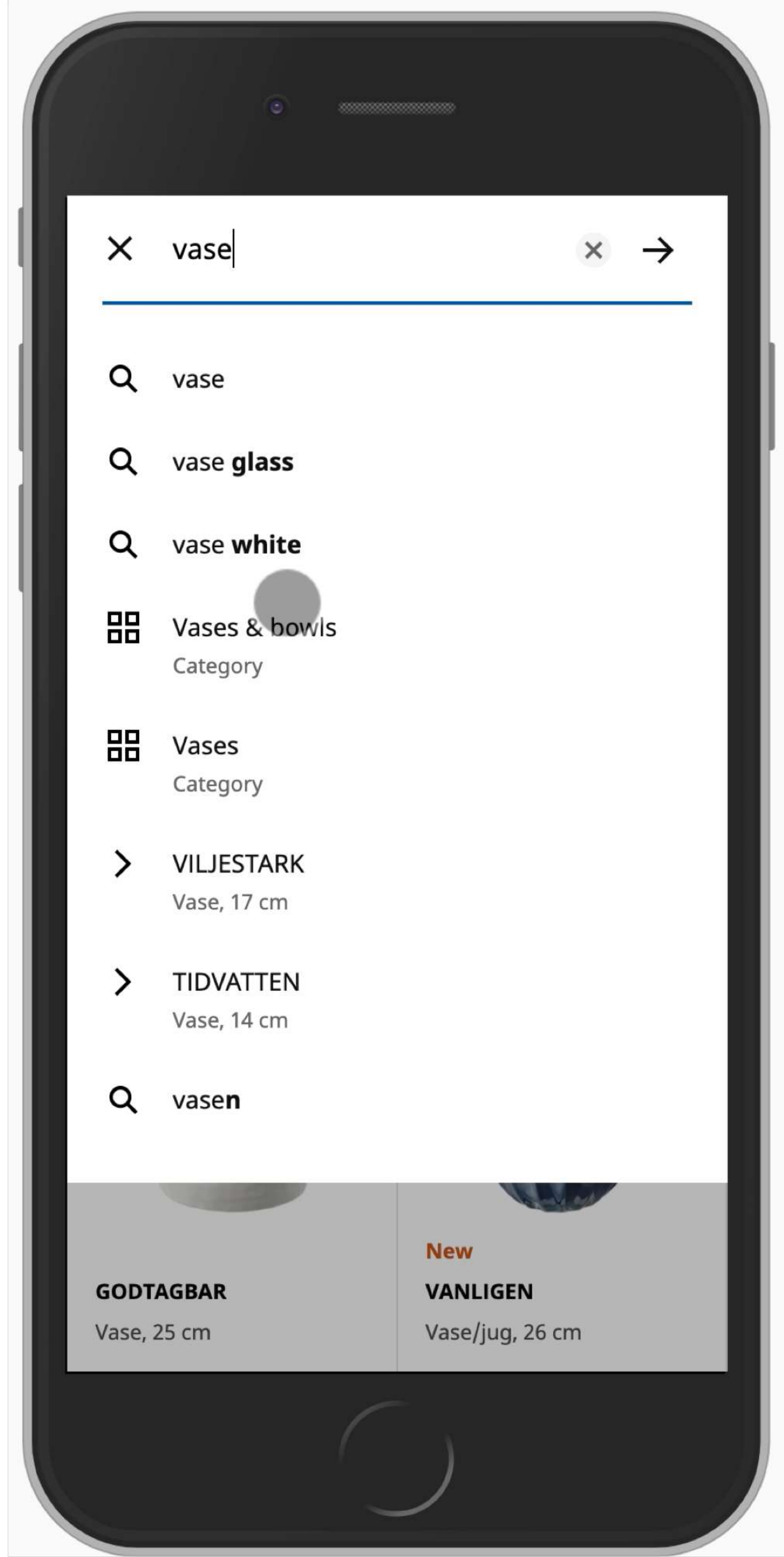
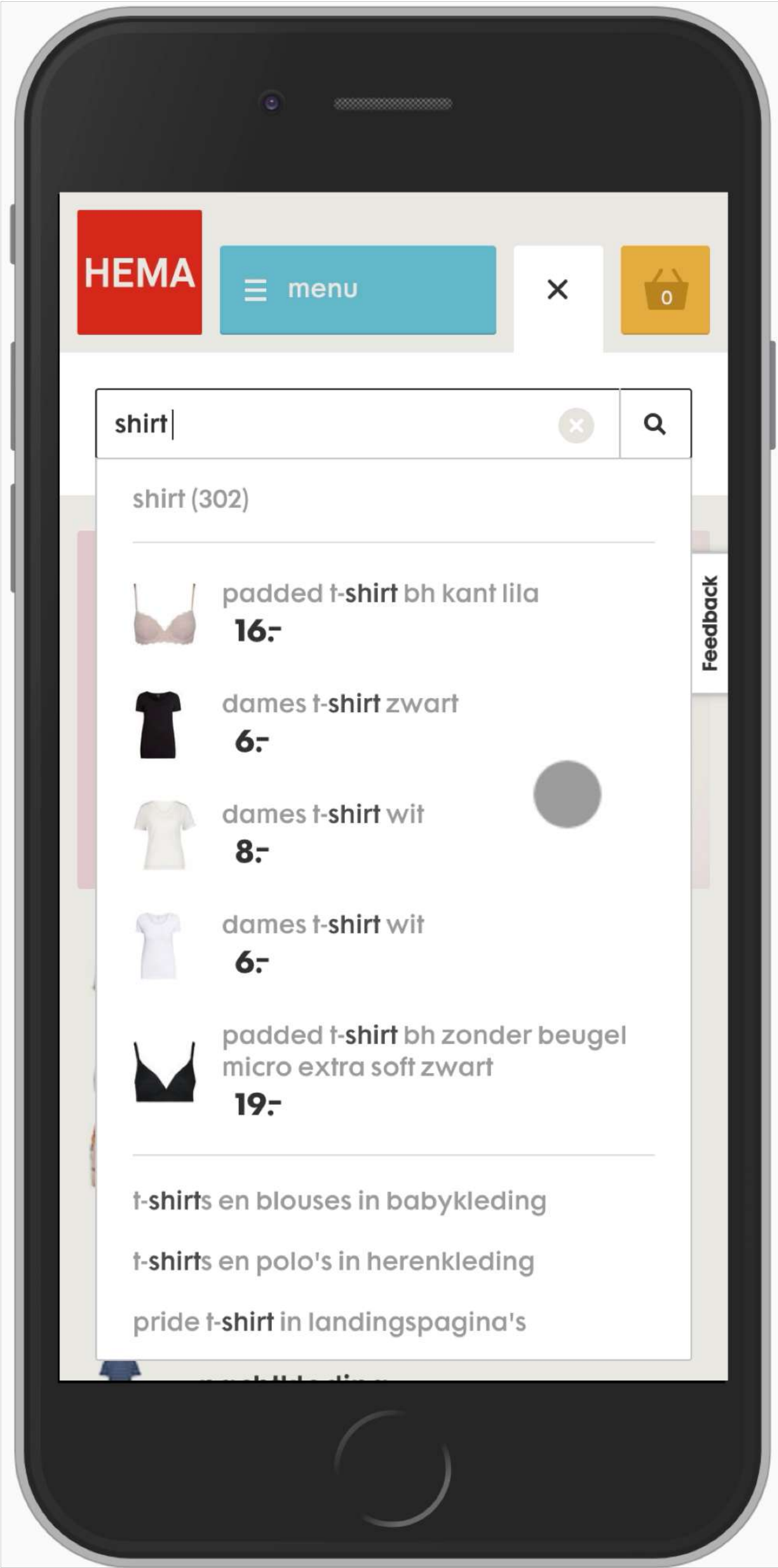
You have 100 words remaining

What could they do to improve?

You have 100 words remaining

# Tap-Ahead Autocomplete

*Autocomplete* is mostly used to highlight relevant *keyword suggestions*. However, we can also allow users to *append* keyword queries to construct *advanced* and *precise* search queries.



Migrat

Search

AREA

Reporting 3.0

AREA

Migration

Immigration

16,209

2020

Emigration

12,427

2020

AREA

Social exclusion and poverty

Absolute poverty

rate

2 %

2020

At-risk-of-poverty

rate

21 %

2020

Urmet Lee: Together we can make future censuses worthy of a digital society

ARTICLE

5 important reminders for a safe census

ARTICLE

☰ **Alle Kategorien**

🔍 Audio



optisches audio kabel



audio kabel



audio interface

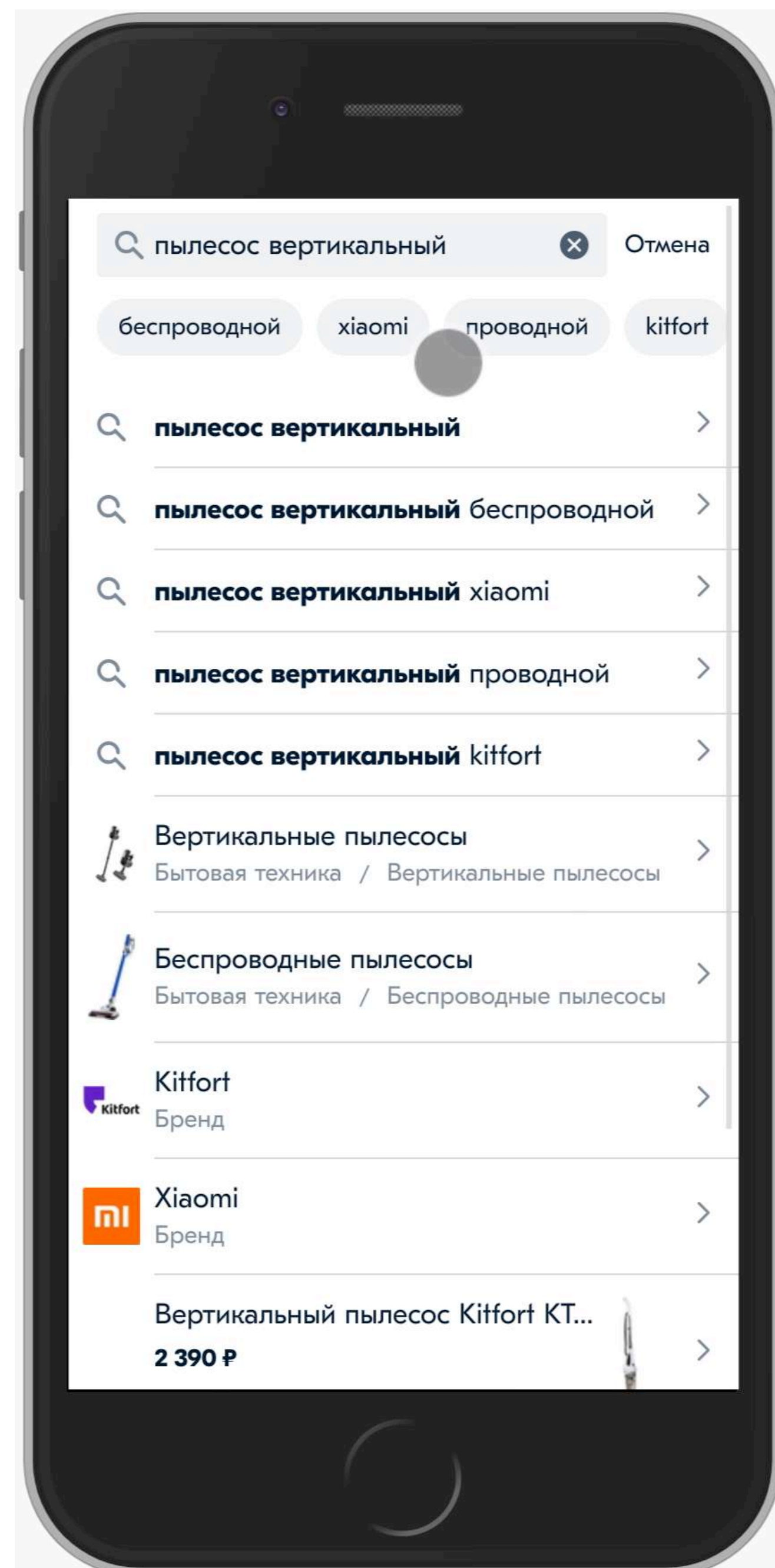


digital audio kabel



bluetooth audio adapter





Complex Data

# Infinite Scroll

*Most overwhelming* option. Users often dive into exploration mode, *scan fast*, and focus less on single items. Loading often feels like “out of control”. Plus, *footer issues*.

Mar 24, 2022	1247	Complete	One time	“Accessibility and Interface Design
Mar 24, 2022	1246	Complete	One time	“Accessibility and Interface Design
Mar 24, 2022	1245	Complete	One time	“Accessibility and Interface Design
<div>25 Orders</div> <div><div></div><div>←</div><div><u>1</u></div><div>2</div><div>3</div><div>4</div><div>5</div><div>→</div><div></div></div>				

WOMEN

WOMEN'S LIFESTYLE SHOES (243)

SORT BY: ▾

- Shoes
- Lifestyle (243)

Running (95)

Football (147)

Basketball (17)

Gym & Training (39)

Skateboarding (11)

+ More
- Sports Bras
- Compression & Nike Pro
- Tops & T-Shirts
- Hoodies & Sweatshirts
- Jackets & Gilets
- Trousers & Tights
- Tracksuits
- Shorts
- Skirts & Dresses
- Surf & Swimwear
- Socks
- Accessories & Equipment



1 Colour

**Nike Benassi Future Cross SE Premium**

Women's Slide

£64.95



1 Colour

**Nike Blazer Premium Low QS**

Women's Shoe

£79.95



1 Colour

**Nike Air Max 1 SE PRM**

Women's Shoe

£109.95



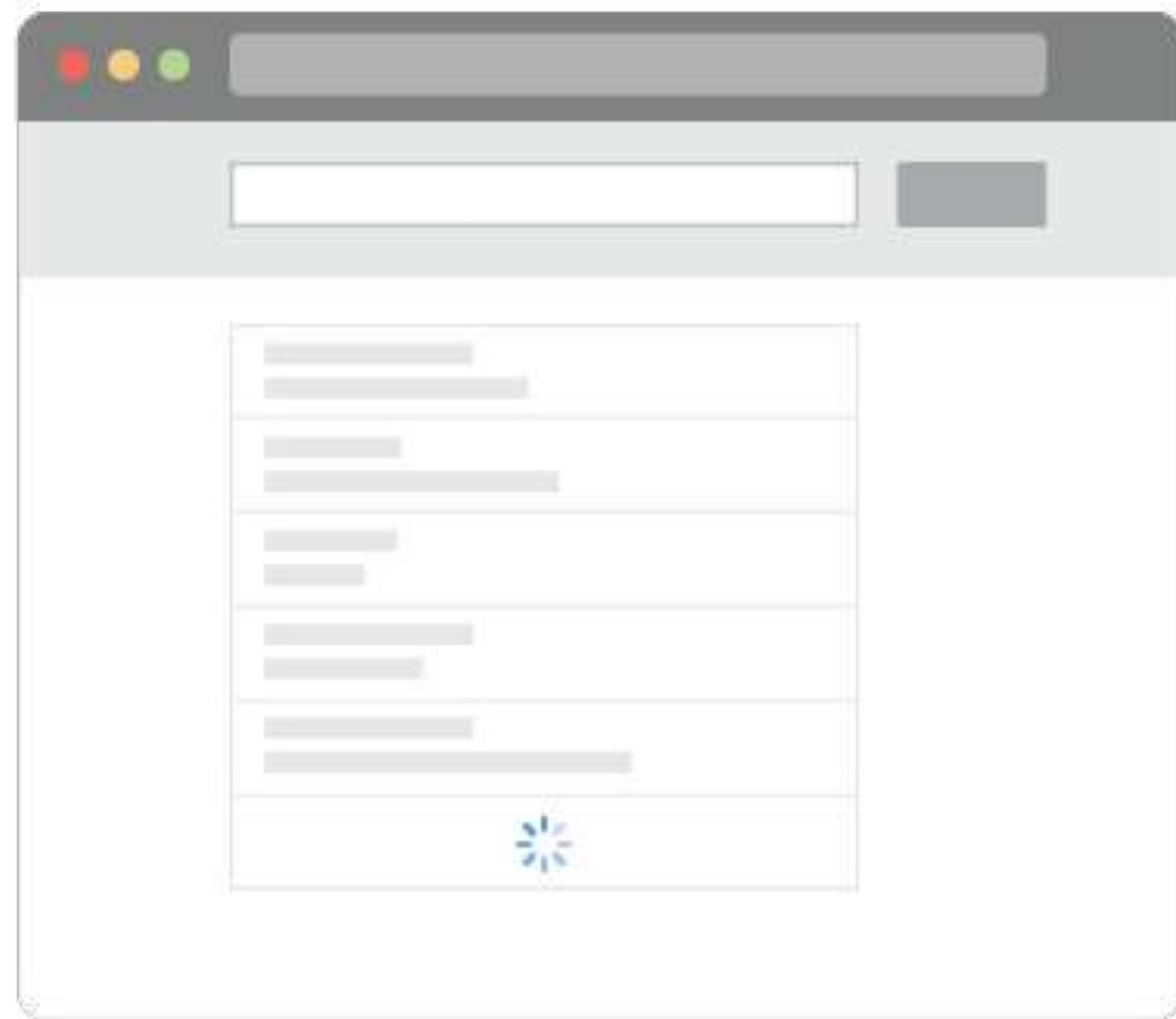
2 Colours

**Nike Air Force 1 '07 SE Premium**

Women's Shoe

£79.95





Outlet



## Sony WH-XB700 EXTRA BASS™

On-ear Bluetooth® headphones (Black)

Item #: 158WXB700B

⚠ Low stock

Scratch & Dent

- Bluetooth connectivity for wireless music and phone calls
- 30mm dynamic drivers with dedicated bass duct for low-end punch
- earcup controls let you answer calls, skip tracks, and control volume

★★★★★  
19 reviews

Free shipping

~~\$128.00~~

-\$18.56 Outlet savings

**\$109.44**

[Add to cart](#)

☐ Compare

Showing 87 of 270 products

[Load more products](#)

Outlet



## Sony WH-XB700 EXTRA BASS™

On-ear Bluetooth® headphones (Black)

Item #: 158WXB700B

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★★★★★  
19 reviews

Free shipping

~~\$128.00~~

-\$18.56 Outlet savings

**\$109.44**

Add to cart

☐ Compare

Showing **87** of **270** products

**Continue browsing later**

Plus, you could win a \$350 gift card

Your email

Send a link to continue later

Load more products



# Meze Audio LIRIC

Closed-back wired Isodynamic® hybrid planar magnetic headphones

Item #: 455LIRIC

✓ In stock

- special hybrid planar magnetic drivers custom-tuned for large, three-dimensional sound
- solidly built with premium materials and metals
- special headband suspension system helps evenly distribute weight

★★★★★  
3 reviews

[Free shipping](#)

**\$2,000.00**

Add to cart

[Open Box: \\$1,800.00](#)

☐ Compare

You've seen **58** out of **270** products

[Show these items on a separate page](#)

Continue here later



# Denon AH-D7200

Reference over-ear headphones

Item #: 033AHD7200

✓ In stock

- self-damping American walnut earcup housings for transparent, organic sound
- Denon's "Free Edge" drivers are tuned for a neutral, "speaker-like" presentation
- 10.25-foot detachable 7N-purity copper cable terminated with a gold-plated 1/4" headphone plug

★★★★★  
2 reviews

[Free shipping](#)

**\$999.00**

Add to cart

☐ Compare



## Over-Ear Headphones

You've seen **58** out of **270** items.

**Send a link to continue later**

Plus, you could win a \$350 gift card

**Send and continue later**





# Meze Audio LIRIC

Closed-back wired Isodynamic® hybrid planar magnetic headphones

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- special headband suspension system helps evenly distribute weight

★★★★★  
3 reviews

[Free shipping](#)

**\$2,000.00**

Add to cart

[Open Box: \\$1,800.00](#)

☐ Compare

You've seen **58** out of **270** products

[Copy a link to this position in the list](#)

Continue browsing later

Plus, you could win a \$350 gift card

Your email

Send a link to continue later



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★★★★★  
2 reviews

[Free shipping](#)

**\$999.00**

Add to cart

☐ Compare

Where to deliver your food?

Deliver on **Today** • 7:00 PM – 7:30 PM

Today's Menu

Bestseller

Malay

Japanese

Asian

Chinese

Fusion

Western

Sides

Drinks

erts

chandise

BESTSELLER



★★★★★ 5563 ratings  
**Roast BBQ Chicken Rice**

RM 14.99

Add to cart



★★★★★ 10k+ ratings  
**Beef Pepperoni Pizzagne**

RM 18.99

Add to cart



★★★★★ 2130 ratings  
**Tuna Pizzagne**

RM 17.99

Add to cart



★★★★★ 8549 ratings  
**Nasi Kerabu with Ayam Berempah**

RM 14.99

Add to cart

City, Language and more

https://www.pepper.pl/omówione

# Scrollbar Range Intervals

With soft-boundaries in mind, customers tend to either use “*scroll and sort*” to scroll down to the *boundaries of interest*, or “*paginate ahead*”. It takes time, and often requires unprecise “swoosh”-scrolling.



Products

Rooms

Q sofa



Sort

Seats

Price

Colour

Shape

Category

Materials

Customer rating

Size

More



New  
**ÅTERBLICK**  
Bowl, 20 cm

£3



**KRATTEN**  
Cushion cover, 50x50 cm  
£3.50

★★★★★ (14)



New  
**ALPKLÖVER**  
Cushion cover, 50x50 cm  
£3.50



Design your own sofa



Sort by: Price Low-High



Andrew Fezza ☆  
Woven Dress Shirt (2 Pack)  
**\$35 Gilt**  
~~\$160~~



Near North ★  
Solid Dress Shirt  
**\$39 Gilt**  
~~\$185~~



☐ Products available to buy online

**1** 2 3 4 5 ... 12

\$8—29—48—83—122—199—\$1,799



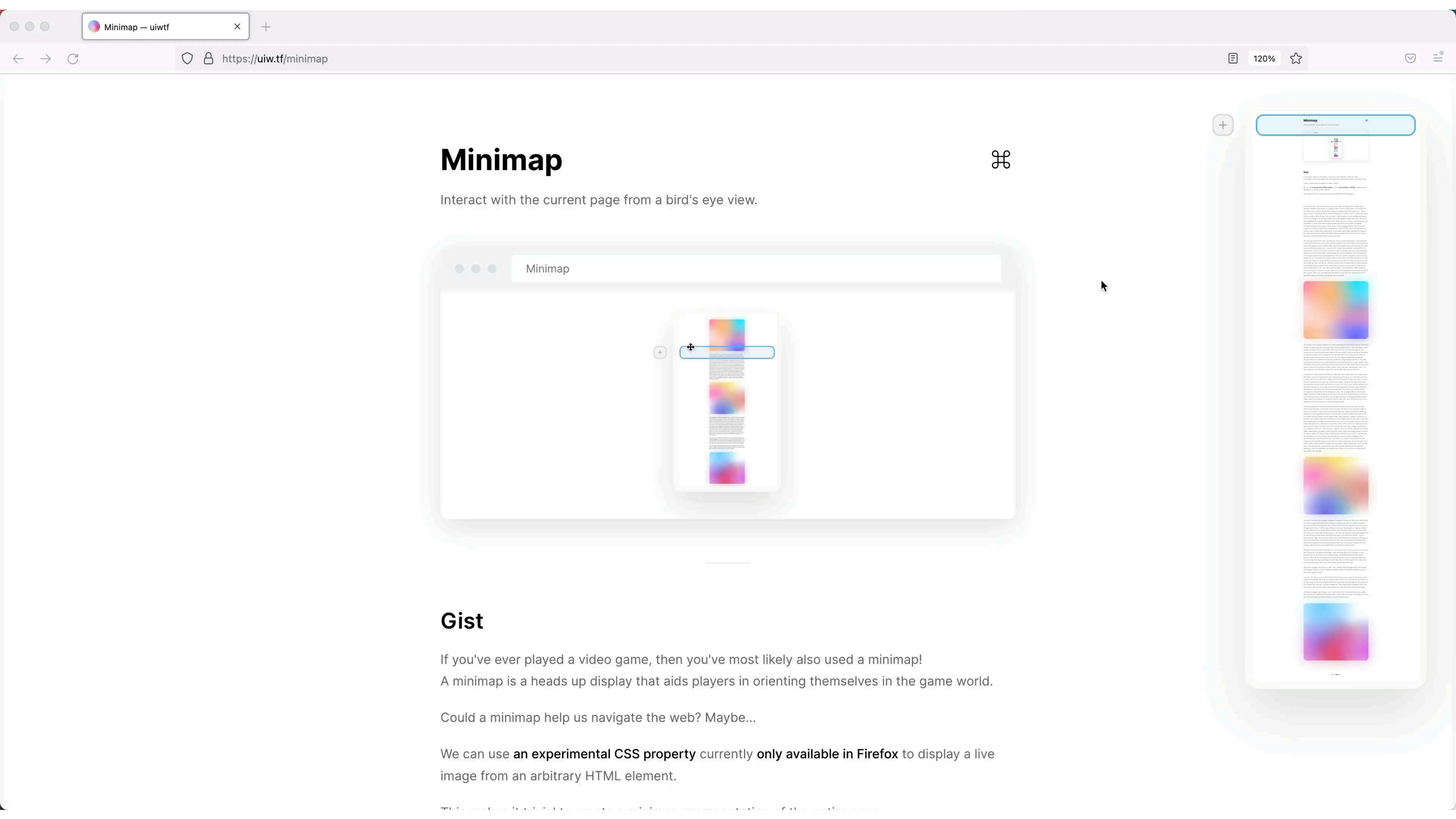
**G**



**ABSORB**

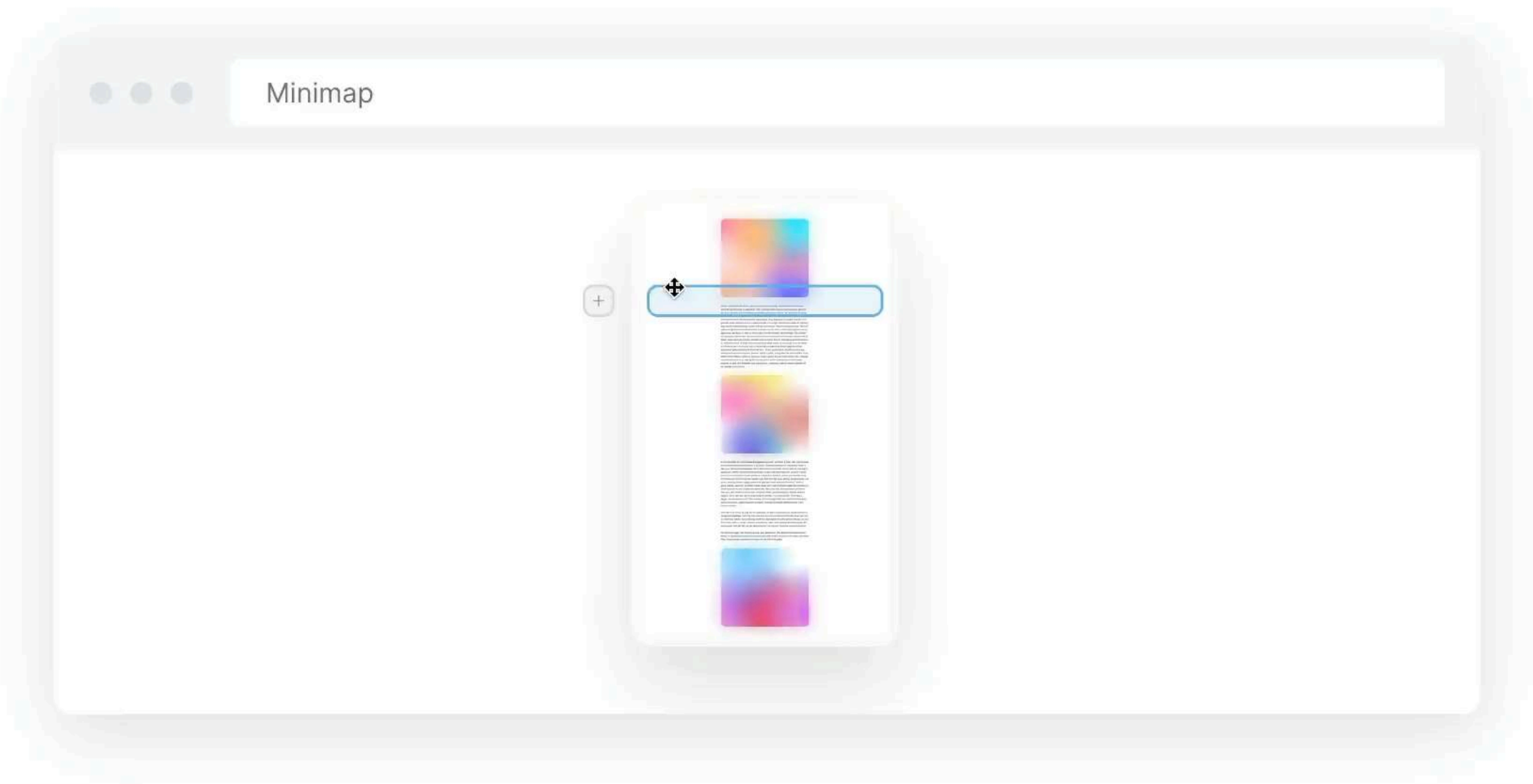


**ABSORB**



# Minimap

Interact with the current page from a bird's eye view.



## Gist

If you've ever played a video game, then you've most likely also used a minimap!  
A minimap is a heads up display that aids players in orienting themselves in the game world.

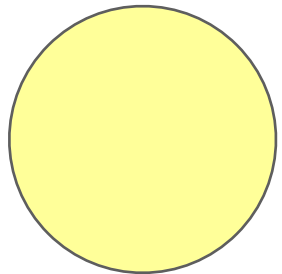
Could a minimap help us navigate the web? Maybe...

We can use **an experimental CSS property** currently **only available in Firefox** to display a live image from an arbitrary HTML element.

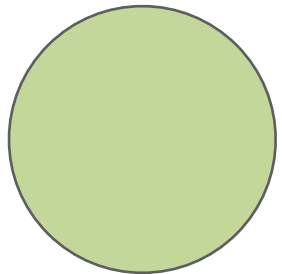
# Scrollbar Range Intervals

We show users's *current position* in the range, and the *exact* position they can jump to. Useful only if the user changes the default sorting type.

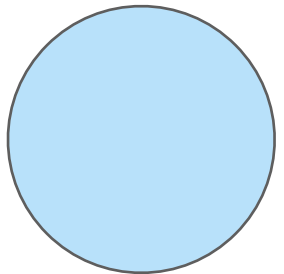
# Public: Table of Tasks



Top 25%



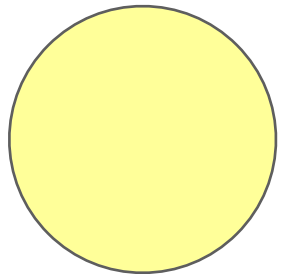
26–50%



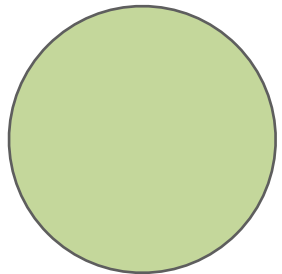
51–75%

	Tasks	Votes (23,201)	% of 5,602 Voters
21	Tracking, monitoring (legislation, resolutions)	450	8%
22	About the European Parliament (what it is, role, history)	440	8%
23	Languages (translation, interpreting)	440	8%
24	European Parliament elections	417	7%
25	European Parliament publications	402	7%
26	European Union publications	400	7%
27	EU institutions' position on proposed legislation	395	7%
28	European Parliament in your country (offices, activities, visits)	384	7%
29	Topic overviews, summaries, fact sheets	383	7%
30	Political structure of the European Parliament	381	7%
31	Myths, fake news, misinformation	380	7%
32	Privacy, data protection	380	7%
33	Physical visit to the European Parliament	379	7%
34	Make a complaint, request an investigation (whistle-blowers, fraud)	369	7%
35	Public register of documents, official documents	362	6%
36	Public consultations	357	6%
37	Statistics	345	6%
38	Public opinion polling (Eurobarometer)	343	6%
39	Raw data, data access, data sets	329	6%
40	Contact the European Parliament	319	6%

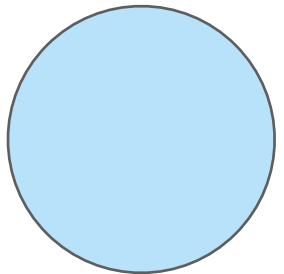
# Public: Table of Tasks



Top 25%



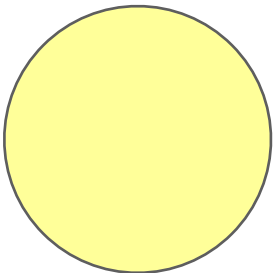
26–50%



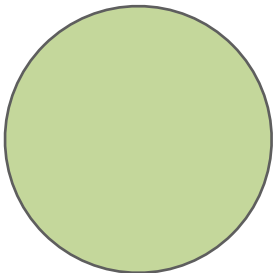
51–75%

	Tasks	Votes (23,201)	% of 5,602 Voters
41	Grants	308	5%
42	MEPs responsible for proposed legislation	293	5%
43	Conferences, events, exhibitions	292	5%
44	Parliament procedures, rules	273	5%
45	Historical archives	269	5%
46	Petitions (rules, setting up)	263	5%
47	Annual accounts, financial reports, budget	259	5%
48	Photos, infographics, recordings, videos	239	4%
49	Issue / topic based groups in Parliament	229	4%
50	Administrative structure of the European Parliament	215	4%
51	Follow European Parliament on social media	191	3%
52	Election monitoring, observation	182	3%
53	Online interactive visit to European Parliament (tour, activities)	174	3%
54	EU political appointments vetting, process	173	3%
55	President of the European Parliament (profile, agenda)	170	3%
56	Delegations (agenda, visits, reports)	156	3%
57	Providing services to the European Parliament	156	3%
58	Request scrutiny of legislation	152	3%
59	Accreditation (journalists, lobbyists, visitors)	126	2%
60	EU glossary, abbreviations, acronyms	121	2%

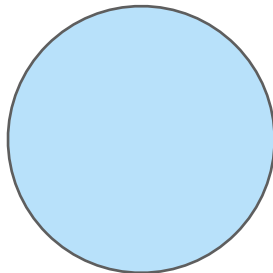
# Public: Table of Tasks



Top 25%



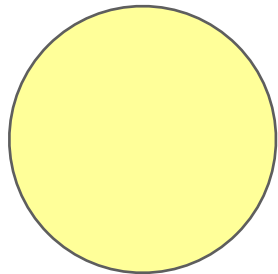
26–50%



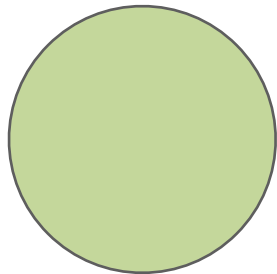
51–75%

	Tasks	Votes (23,201)	% of 5,602 Voters
61	Prizes, awards	94	2%
62	Secretary-General	88	2%
63	Event patronage, endorsement	78	1%
64	Branding materials (style guide, permissions, logos)	77	1%
	Total	23201	

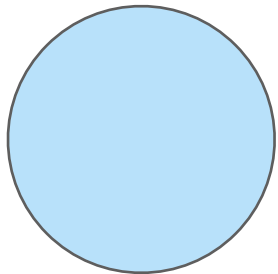
# 30 Tasks for Sorting



**Top 25%**



**26–50%**



**51–75%**

	Tasks	% of total
25	Doing business in the EU	1,5 %
26	Economic growth, financial stability in EU	1,4 %
27	Doing business with EU Commission (tenders, bids)	1,4 %
29	Industry norms and standards	1,3 %
33	Travel within, to and from EU (documents, visa, currencies, consular help)	1,2 %
35	Banking and financial markets (reform, regulation)	1,1 %
36	Relations with non-EU countries, international organizations	1,1 %
38	Competition (state aid, cartels, mergers, anti-trust)	1,0 %
39	Development and humanitarian aid	1,0 %
43	Loans, access to finance, microfinance	0,9 %
63	Accession of new countries to the EU, enlargement	0,9 %

# Tasks Sorting

Get 15–30+ people to independently sort the tasks into *groups*. Give them a survey afterwards to double check how *representative* they are.

# Top Tasks Sorting

EU strategy, political priorities
Doing business in the EU
EU news, announcements, press releases
Food and farming (production and safety)
Order, download an EU publication
Conferences, summits, meetings, events
Industry norms and standards
Public health, disease prevention

▼ Click to rename X

Environmental protection

Climate change, global warming

▼ Click to rename X

Working in an EU country (rights, permits, benefits)

Find a job in another EU country

Designing For Complex Systems —

# Wrapping Up



# Healthy Quality Metrics

All metrics can be *moved* with better design. Good design is always *good for business* because it reduces errors and costs and produces *quality ouptput*.

---

*Luke Wroblewski, “Mind The Gap”*

# Healthy Quality Metrics

The end result is *consistent*, predictable improvements *over time*, with holistic, *evidence-based* decisions that account for both business and user needs.

# Summary

- 01 – We can support complex systems with a good design.
- 02 – Design KPIs help address business decisions.
- 03 – Define constraints and user-centric goals first.
- 04 – Identify top tasks and measure them over time.
- 05 – Quantitative insights describe trends.
- 06 – Qualitative insights describe behavior leading to trends.
- 07 – Use System Usability Scale to evaluate design.
- 08 – Kano model helps us create impact without much cost.
- 09 – Design patterns guide our design decisions.
- 10 – Evidence-based design helps us get to 90% success rate.

Contact details

# Meow! Thanks for being smashing.

Checklists: [www.smashed.by/checklists](http://www.smashed.by/checklists)

Twitter: @smashingmag

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Compiled and curated by Vitaly Friedman, 2012–2022.

