



Visualizing Data for Policy-Making

EU Open Data Days 2021

Benjamin Wiederkehr

November 24, 2021

Interactive Things

hello@interactivethings.com

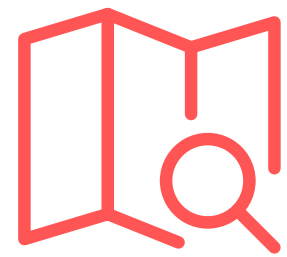


Hi, we're Interactive Things,
a design and development studio
for human data interaction.



Three Jobs of Data Visualization

Helping people to find, understand, and share insights in data.



Discovery

We help people search for significant facts within data to discover meaningful insights.



Understanding

We help people make sense of data to better understand the world around them.

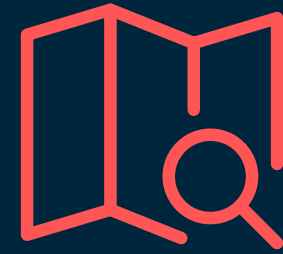


Communication

We help people convey insights to others to raise comprehension, awareness, and engagement.



Does discovering insights,
understanding what they mean, and
sharing them with others play a role in
the policy-making cycle? You bet.



Discovery

Search for significant facts within data to discover meaningful insights.



Going Digital Toolkit

Data platform to help countries realise the promises of the digital transformation.

Client OECD

Release March 2019

Services Interaction Design, Interface Design, Information Design, Data Visualization, Software Engineering

Credits Christoph Schmid, Luc Guillemot, Tomas Carnecky, Solange Vogt, Jeremy Stucki, Flore de Crombrughe

Link goingdigital.oecd.org

OECD.org Going Digital Project EN

Home Policy Dimensions Countries Themes About

Going Digital Toolkit

How countries assess their state of digital development and formulate policy response. Data exploration and visualisation are key features of the Toolkit.

Digital technologies

An ecosystem of interdependent digital technologies, driven by increases in computing power and declines in costs, underpins digital transformation.

- Fixed broadband subscriptions per 100 inhabitants
- Mobile broadband subscriptions per 100 inhabitants
- M2M (machine-to-machine) SIM cards per 100 inhabitants
- Share of businesses with broadband contracted speed of 30 Mbps or more
- Total ICT investment as a percentage of GDP

Access Use Innovation Data Tax SMEs Productivity Digital government

Denmark compared to Global Average

Goddag, It seems like you are in Denmark

otherwise select a country you're interested in

Highlighted country: Select country Reference value: OECD

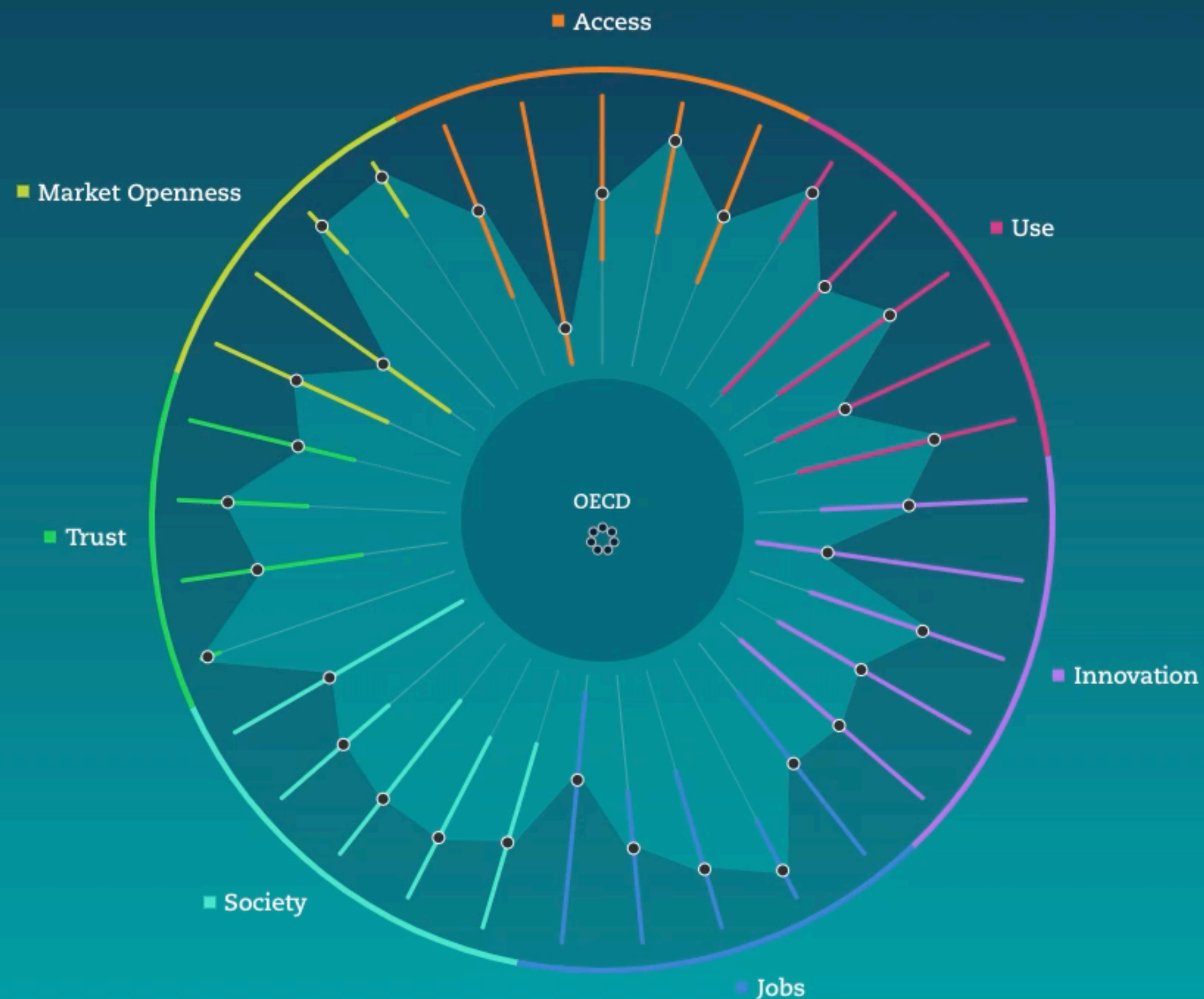
Policy Dimensions

Constructed along the 7 policy dimensions of the Going Digital Integrated Policy

Going Digital Toolkit



The Going Digital Toolkit helps countries assess their state of digital development and formulate policy strategies and approaches in response. Data exploration and visualisation are key features of the Toolkit.



[How to read the visualisation](#)

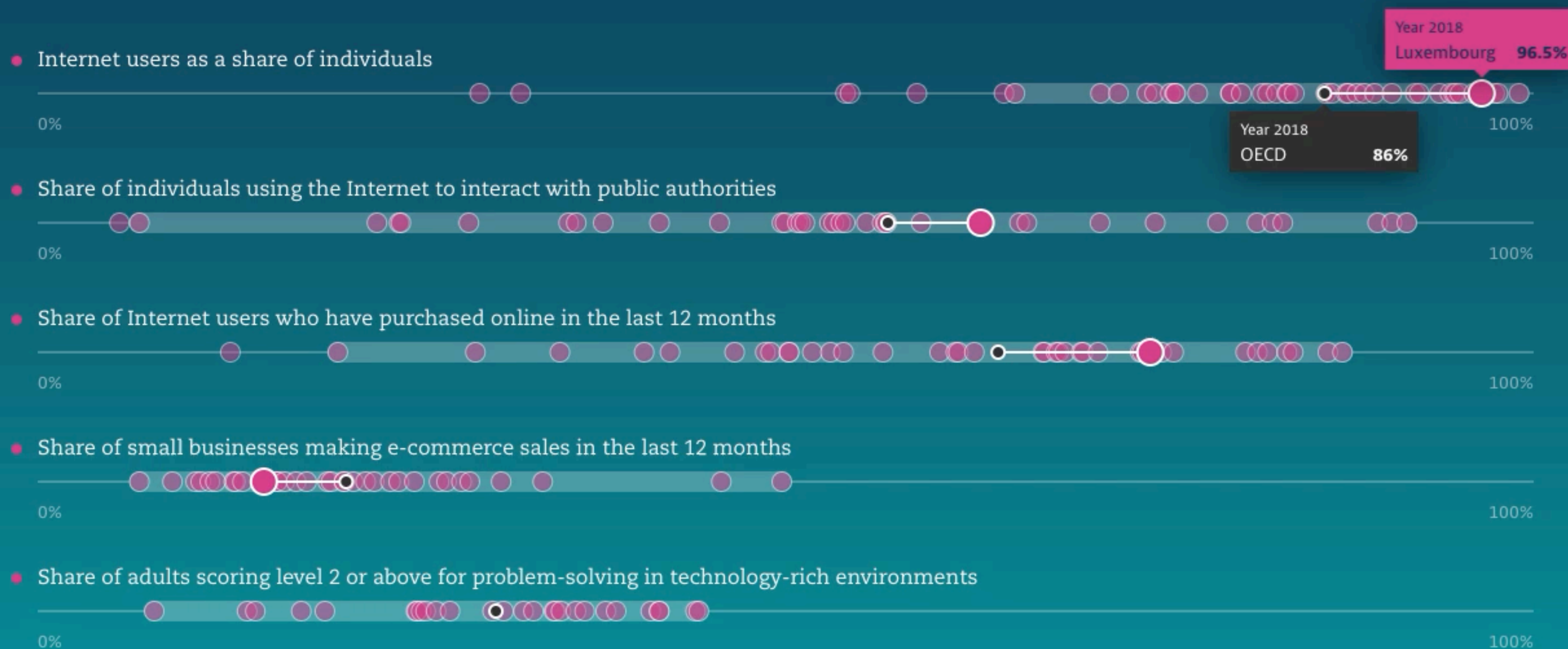
Highlighted country
Select country ▼

Reference value
OECD ▼

Use



The power and potential of digital technologies and data for people, firms and governments depends on their effective use.


[Show disclaimer](#)

Source: OECD

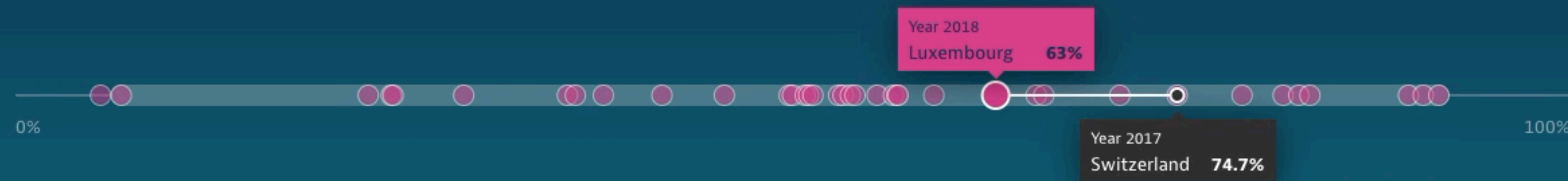
[How to read the visualisation](#)

 Highlighted country
 Luxembourg

 Reference value
 OECD

Description

Share of individuals using the Internet to interact with public authorities



[Show all indicators of Use](#)

Description

Individuals using the Internet to interact with public authorities, as a percentage of all individuals aged 16-74 years. Measured interactions range from simply obtaining information from government websites to interactive procedures where completed forms are sent via the Internet. Excludes manually typed e-mails. It should be noted, however, that the need to submit forms, as well as the availability of online submission channels, varies between countries. Public authorities refers to public services and administration activities at the local, regional or national level.

[Download data](#)



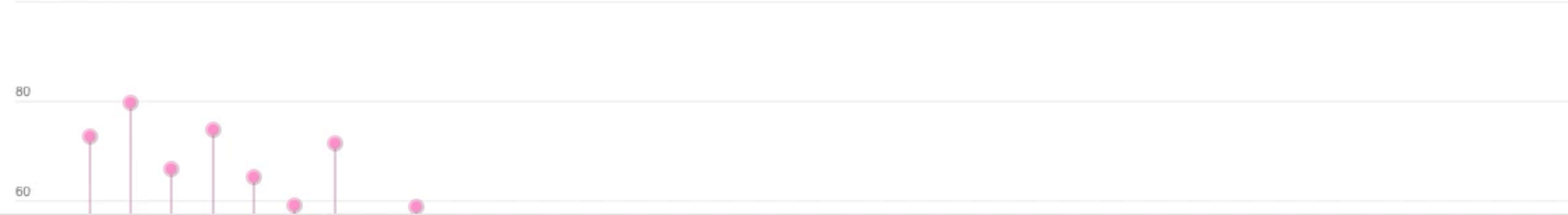
[Download chart image](#)



[Share chart](#)



100 % of individuals



Toolkit

Countries



Do you know how your country's state of digital development compares? Find out by exploring the Going Digital indicators and OECD policy insights.



Memberships
All countries





Discovery

The ability to independently inspect the visualization and discover insights will empower the audience to **ask questions, find answers, and draw conclusions.**



Understanding

Make sense of data to better understand the world around us.



Wellbeing in Germany

Data-driven government report on the wellbeing of German citizen.

Client German Federal Government
 Release October 2016
 Services Interaction Design, Interface Design, Data Visualization, Software Engineering, Content Management
 Credits Benjamin Wiederkehr, Christoph Schmid, Ece Kavlak, Jeremy Stucki, Tania Boa, Thomas Preusse, Tomas Carnecky
 Link gut-leben-in-deutschland.de

Die Bundesregierung

ENGLISH ZUR BUNDESREGIERUNG KONTAKT | GEBÄRDENSPRACHE | LEICHTE SPRACHE

GUT LEBEN IN DEUTSCHLAND Was uns wichtig ist

Interaktiver Bericht Indikatoren Über den Regierungsbericht

MENÜ

Die Bundesregierung

GUT LEBEN IN DEUTSCHLAND Was uns wichtig ist

Zeit haben für Familie und Beruf

Zeit haben für die wichtigen Dinge im Leben zu haben. Dieses Gefühl haben Menschen im Dialog beschrieben. Ob für den Beruf, die Familie oder die Freizeit. Eine bessere Vereinbarkeit von Familie und Beruf, flexible Arbeitszeiten, ein Ausbau von Home-Office Arbeitsplätzen, aber auch mehr Zeit für sich - das ist den Menschen wichtig.

Arbeitszeitverkürzung für Betreuungsaufgaben

Zeit haben für Familie und Beruf

30%

15%

0

2006 2014

Vergleich der tatsächlichen und gewünschten Arbeitszeit

Zeit haben für Familie und Beruf

Tatsächliche Arbeitszeit

Frau

20% arbeiten mehr

95% wünschen sich mehr

42,0 Stunden

20,0 Stunden

42,0 Stunden

5% 95%

5% 95%

55% arbeiten weniger

45% arbeiten mehr

Quelle: Berechnungen des DIW Berlin, SOEPv31.1.

Wellbeing in Germany

[INTERACTIVE REPORT](#)

[INDICATORS](#)

[Download the government report as PDF](#)

With its “Wellbeing in Germany – what matters to us” initiative, the federal government is turning its attention to the issue of wellbeing. It is designed to

Healthy throughout life

Being and staying healthy – this is wellbeing, according to people who took part in the national dialogue. A strong healthcare system that provides everyone with good medical care, whether they live in the city or the country. Short waiting times for appointments with specialists, irrespective of whether they have public or private health insurance.

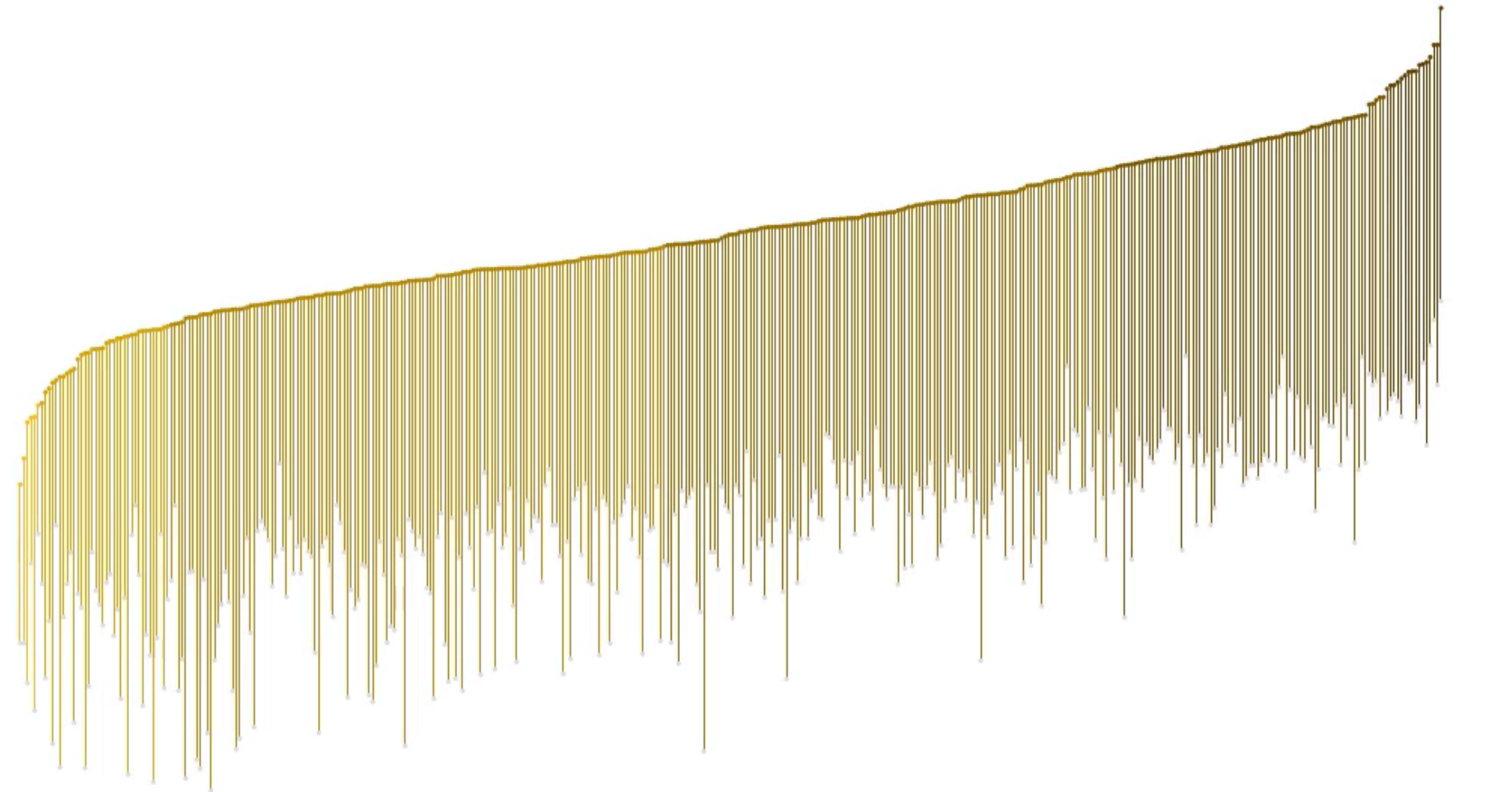
“Health is the most important thing, of course – as well as sufficient possibilities for maintaining one’s health by means of an effective health care system that offers either

Life expectancy in years

- 77.55 - 78.51
- 78.51 - 79.47
- 79.47 - 80.43
- 80.43 - 81.39
- 81.39 - 82.34
- 82.34 - 83.30



Discover the regional differences.



← Districts with lower life expectancy

Districts with higher life expectancy →



Understanding

The structure of a narrative provides your audience with the **necessary guidance to understand context** and allows you as the author to gradually **reveal insights.**



Communication

Convey insights to raise comprehension, awareness, and engagement.



visualize.admin.ch

Open data platform and chart creator to inform the public about the state and development of the environment.

The screenshot displays the visualize.admin.ch interface with three different chart views for the data 'Holzernte in der Schweiz, in m3' (Wood harvest in Switzerland, in m3) from 2000 to 2018.

- Top Chart (Stacked Bar):** Shows the total wood harvest broken down by region: Alpen (purple), Alpen-Südseite (brown), Jura (orange), Mittelland (green), Schweiz (blue), and Voralpen (red).
- Middle Chart (Area):** Shows the same data as an area chart, highlighting the trend over time.
- Bottom Chart (Scatter Plot):** Shows individual data points for each year, color-coded by region.

On the right side, there is a data table with columns 'ntüمرتyp' and 'Stammholz', and a configuration panel for 'Spalte 3' (Column 3) with options for visualization style (Categorical), font (B), and color palette.

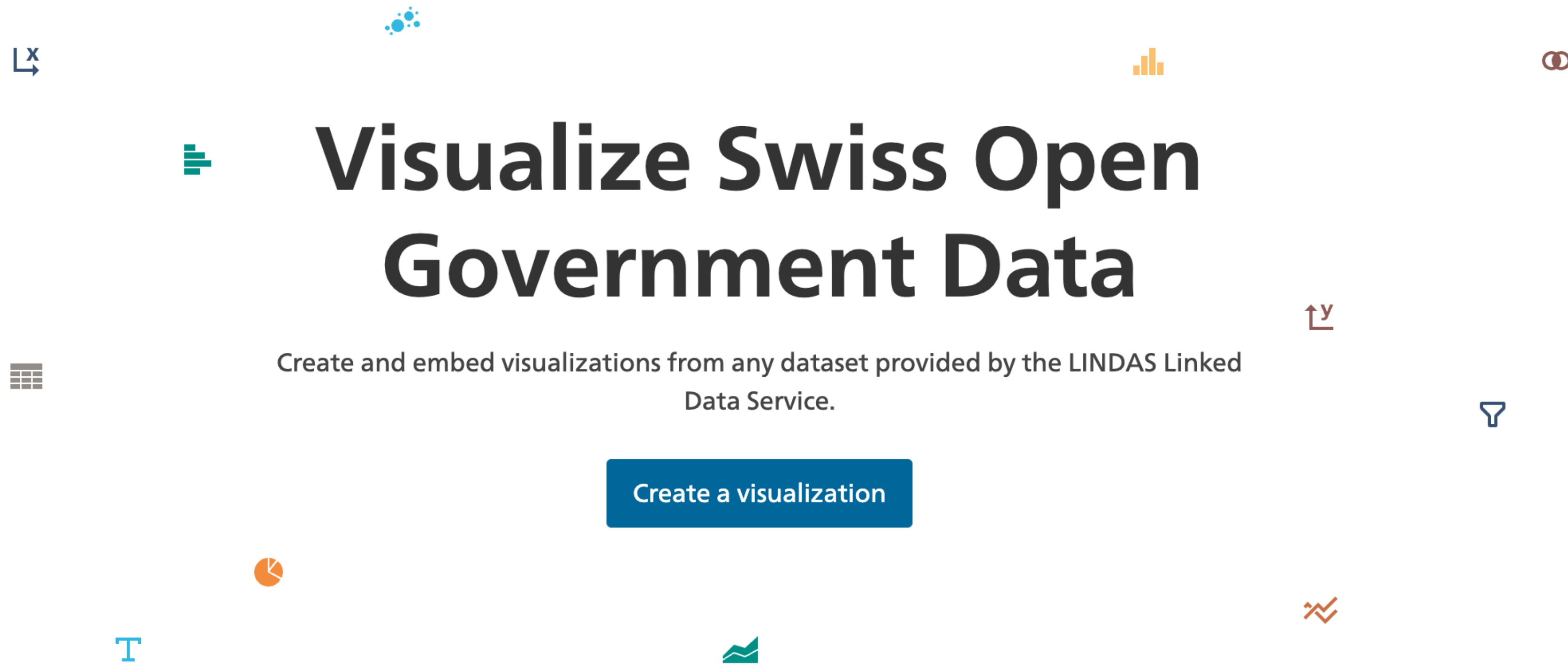
Client Swiss Federal Office for the Environment

Release March 2020

Services Interface Design, Interaction Design, Data Visualization, Software Engineering

Credits Annina Walker, Bartosz Prusinowski, Jan Wächter, Jeremy Stucki, Luc Guillemot, Patrick Brown, Solange Vogt

Link visualize.admin.ch

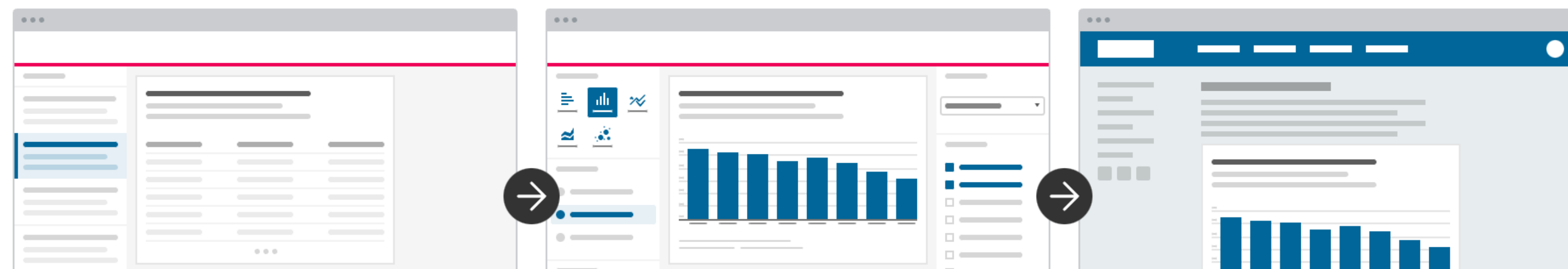


Visualize Swiss Open Government Data

Create and embed visualizations from any dataset provided by the LINDAS Linked Data Service.

Create a visualization

Visualize data in just a few steps...





Q Forest ✕

14 results Sort by Relevance ▾

Forest area in Switzerland, in ha by Year, Forest zone, Canton, Type of owner and Variable

Forest area in Switzerland, in ha

Forest Enterprise Network (FEN): Investments - Business indicators by Investment, Forestry zone and Year
Forest Enterprise Network (FEN): Investments - Business indicators by forestry zones

Forestry enterprises of Switzerland by Year, Forest zone, Canton, Category of size class, Fiscal sovereignty and Variable
Forestry enterprises of Switzerland, from 2015

Forest Enterprise Network (FEN): Total enterprise results - Business indicators by Indicator, Forestry zone, Main product area and Year
Forest Enterprise Network (FEN): Total enterprise - Business indicators by forestry zones and main product areas

Forest Enterprise Network (FEN): Results from accessory activities - Business indicators of the main product area services by Indicator, Forestry zone, Product and Year

Forest Enterprise Network (FEN): Results from accessory activities - Business indicators of the main product area services by forestry zones and products

Forest area in Switzerland, in ha by Year, Forest zone, Canton, Type of owner and Variable

Forest area in Switzerland, in ha

Year	Forest zone	Canton	Type of owner	For
1975	Switzerland	Switzerland	Type of owners - Total	
1975	Switzerland	Switzerland	Private forest	
1975	Switzerland	Switzerland	Public forest	
1975	Switzerland	Switzerland	>>Federal forest	
1975	Switzerland	Switzerland	>>Cantonal forest	
1975	Switzerland	Switzerland	>>Municipality forest	
1975	Switzerland	Switzerland	>>Bourgeois forest	
1975	Switzerland	Switzerland	>>Other public forest	
1975	Switzerland	Zürich	Type of owners - Total	
1975	Switzerland	Zürich	Private forest	

Showing first 10 rows

Title

Forest area in Switzerland, in ha by Year, Forest zone, Canton, Type of owner and Variable

Source

Section economical structures and analysis WSA, e-mail: agrar@bfs.admin.ch

Date created

30.08.2016 18:09

Next

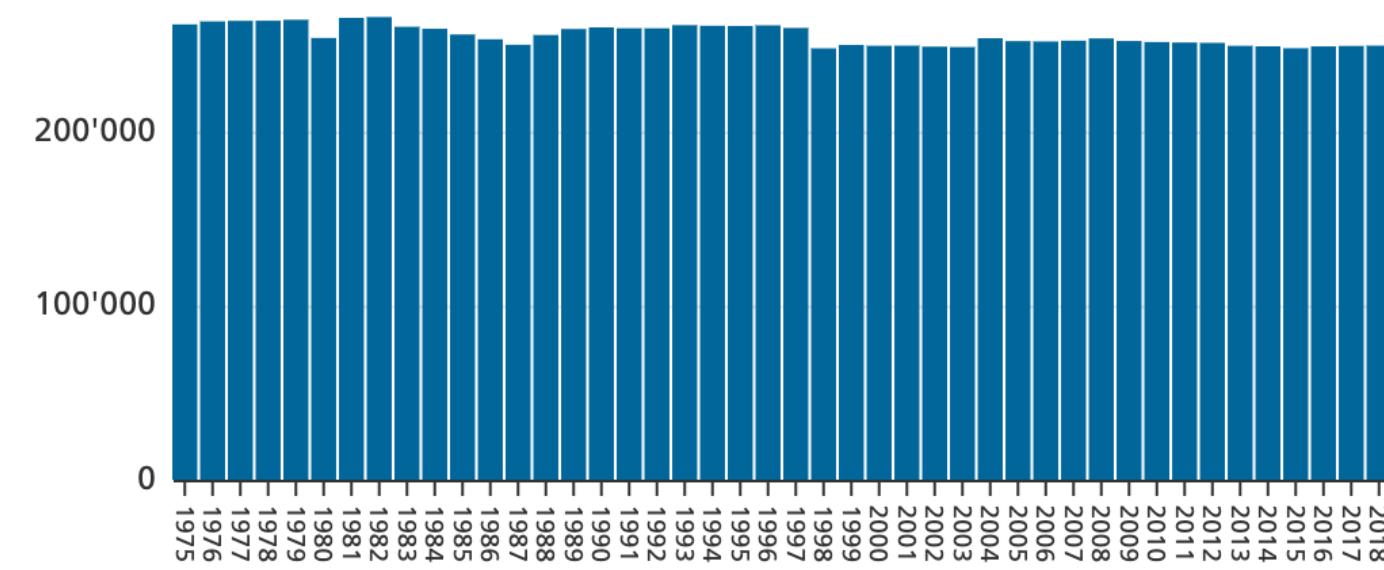
Chart type



[Insert title here]

[Add description here]

Forest owners number



Filterset: Forest zone (Switzerland), Canton (Switzerland), Type of owner (Type of owners - Total)

Dataset: Forest area in Switzerland, in ha by Year, Forest zone, Canton, Type of owner and Variable

Source: Section economical structures and analysis WSA, e-mail: agrar@bfs.admin.ch

[Download data](#)

Previous

Next

Chart type



Columns



Lines



Areas



Scatterplot

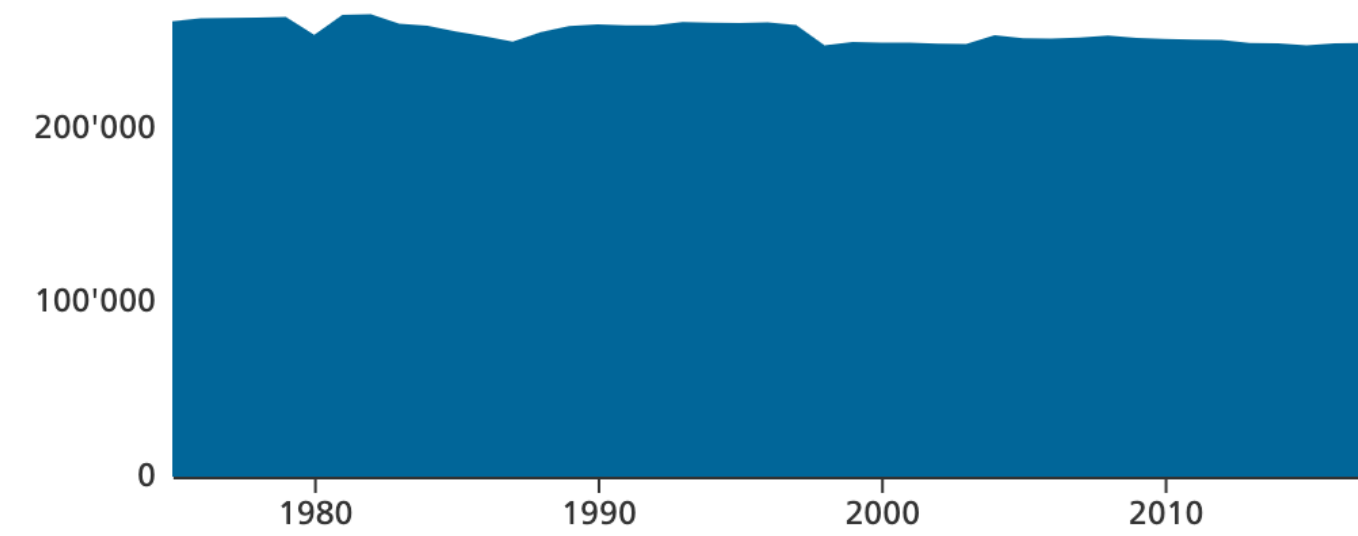


Pie

[Insert title here]

[Add description here]

Forest owners number



Filterset: Forest zone (Switzerland), Canton (Switzerland), Type of owner (Type of owners - Total)

Dataset: Forest area in Switzerland, in ha by Year, Forest zone, Canton, Type of owner and Variable

Source: Section economical structures and analysis WSA, e-mail: agrar@bfs.admin.ch

[Download data](#)

Previous

Next

Chart type



Columns



Lines



Areas



Scatterplot

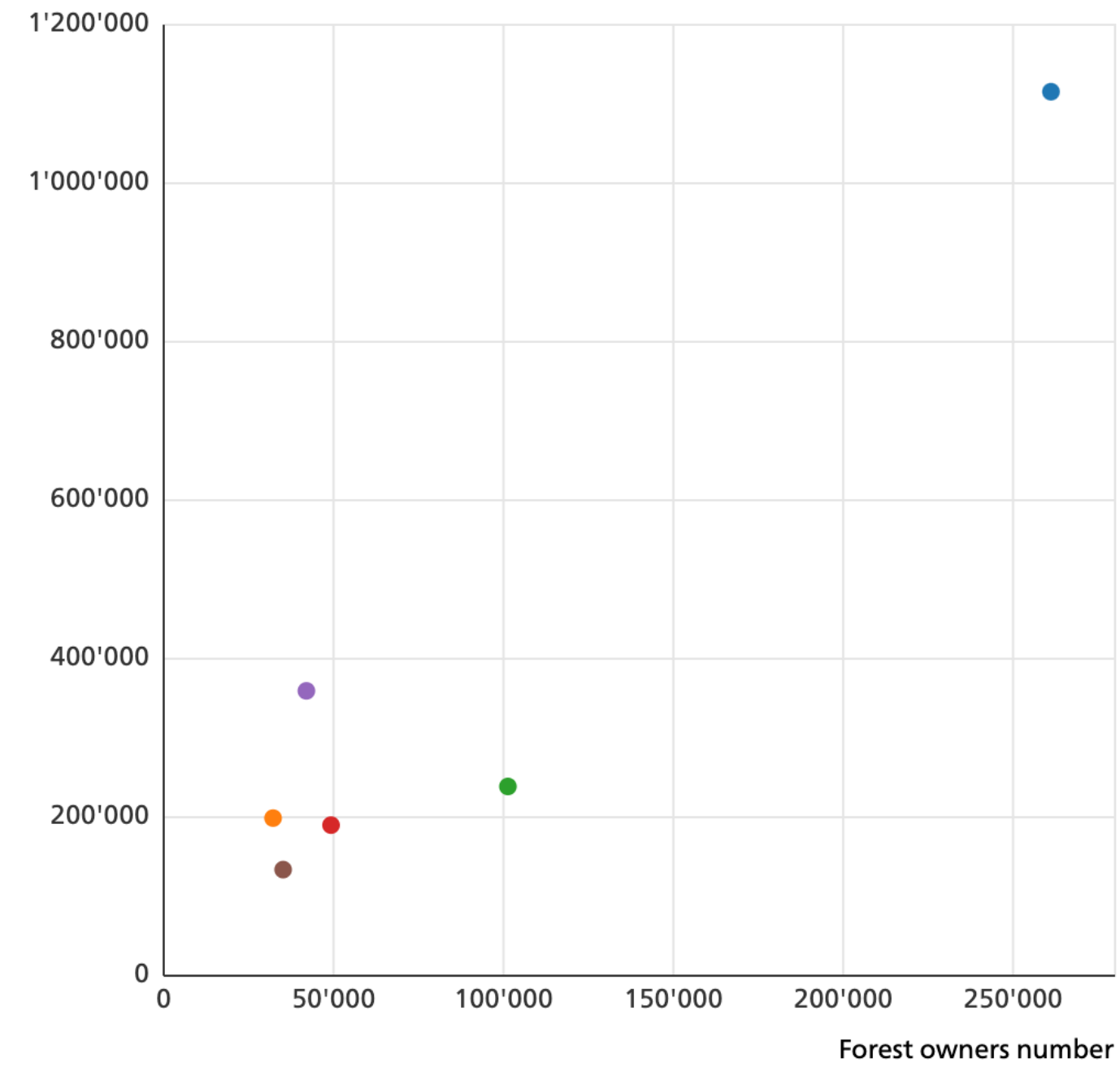


Pie

[Insert title here]

[Add description here]

Total forest area



● Alps ● Central Plain ● Jura ● Prealps ● Southern Alps ● Switzerland

Filterset: Year (1975), Canton (Switzerland), Type of owner (Type of owners - Total)

Dataset: Forest area in Switzerland, in ha by Year, Forest zone, Canton, Type of owner and Variable

Source: Section economical structures and analysis WSA, e-mail: agrar@bfs.admin.ch

[Download data](#)

Previous

Next

Design

Measure
Forest owners number

Horizontal axis
Year

Partition
Forest zone

Data

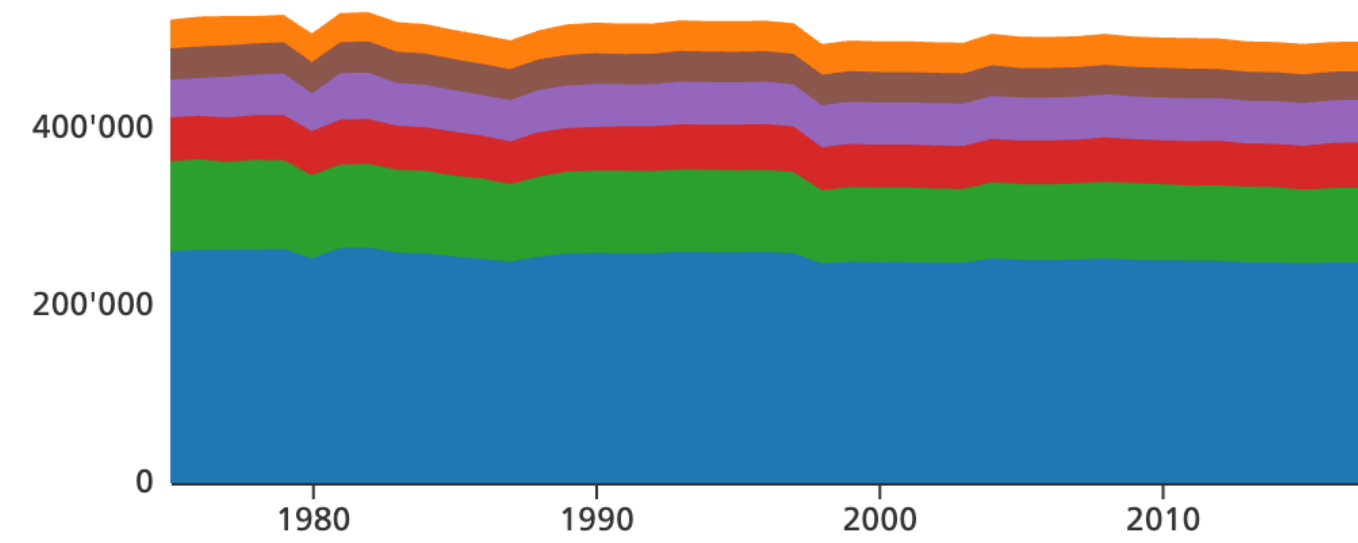
Canton
Switzerland

Type of owner
Type of owners - Total

[Insert title here]

[Add description here]

Forest owners number



■ Switzerland ■ Central Plain ■ Prealps ■ Alps ■ Southern Alps ■ Jura

Filterset: Canton (Switzerland), Type of owner (Type of owners - Total)

Dataset: Forest area in Switzerland, in ha by Year, Forest zone, Canton, Type of owner and Variable
Source: Section economical structures and analysis WSA, e-mail: agrar@bfs.admin.ch

[Download data](#)

Previous

Next

Partition

Select a dimension

Forest zone

Color palette



[Reset color palette](#)

Sort

Sort by

Total size

Largest top

Largest bottom

Filter

Select all · [Select none](#)

Switzerland

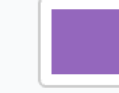
Jura

Central Plain

Prealps

Alps

Southern Alps





Dataset



Chart Type



Adjust



Annotate

Annotate

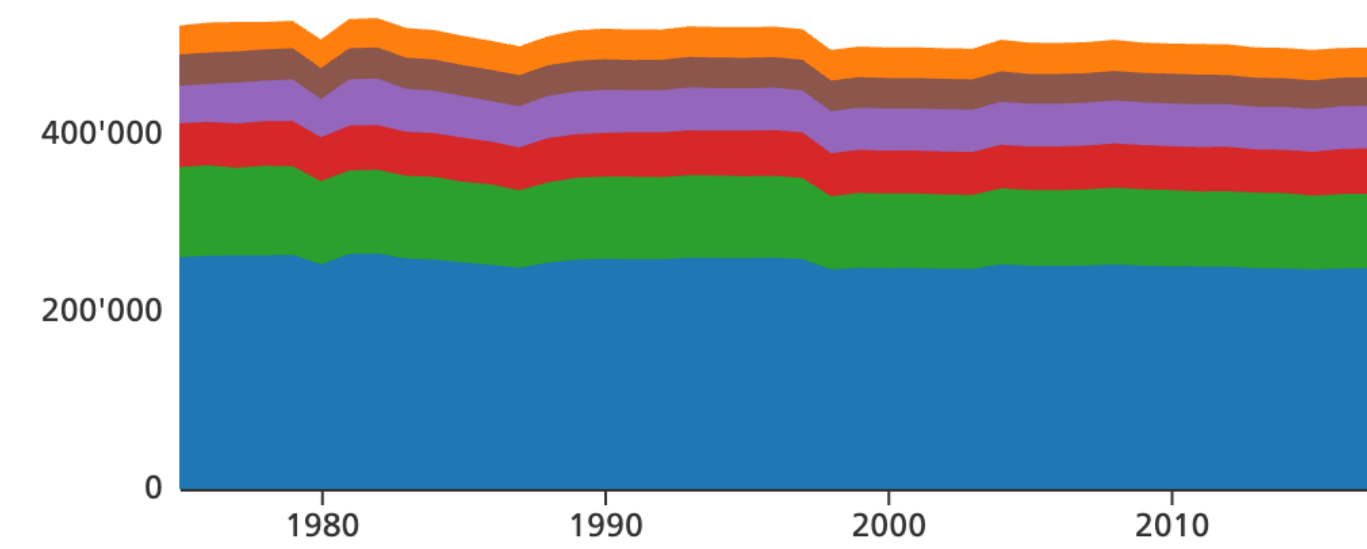
Title

Description

Forest Area in Switzerland

Change over time of the forest area in Switzerland by forest zone.

Forest owners number



■ Switzerland ■ Central Plain ■ Prealps ■ Alps ■ Southern Alps ■ Jura

Filterset: Canton (Switzerland), Type of owner (Type of owners - Total)

Dataset: Forest area in Switzerland, in ha by Year, Forest zone, Canton, Type of owner and Variable

Source: Section economical structures and analysis WSA, e-mail: agrar@bfs.admin.ch

[Download data](#)

Previous

Publish

Description

English

Change over time of the forest area in

German

French

Italian

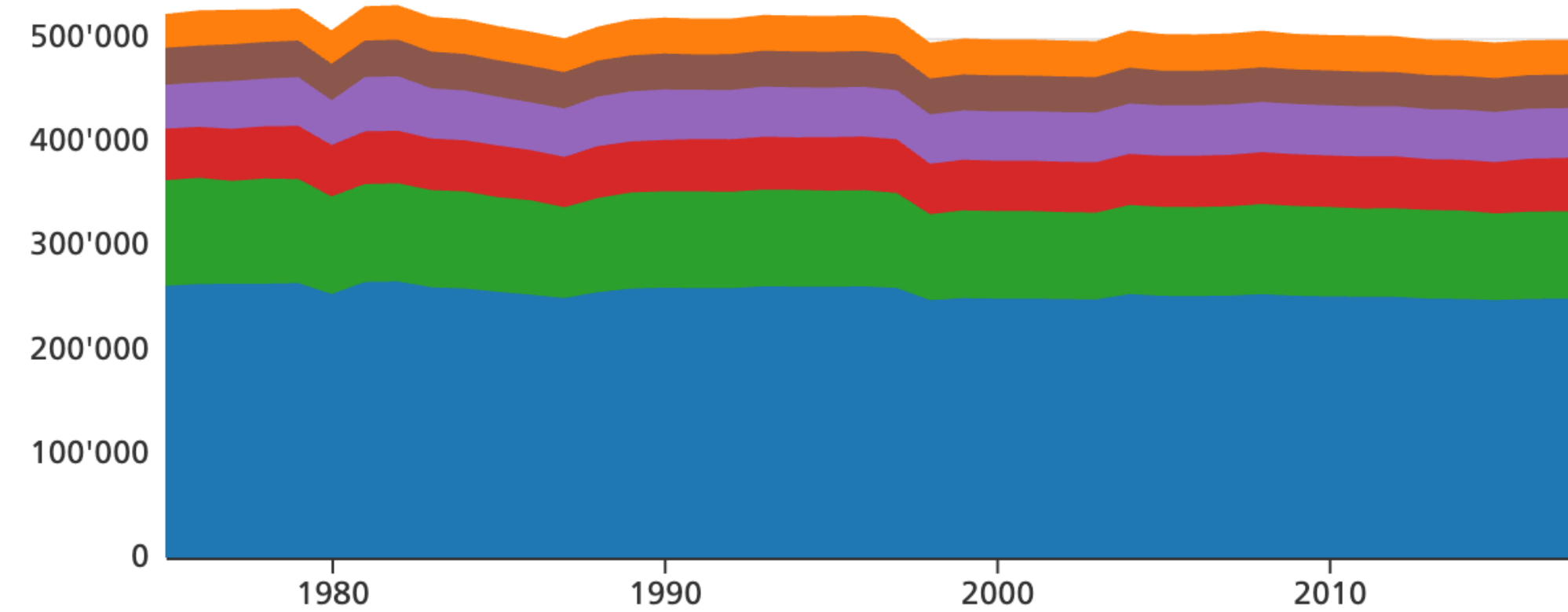


Your visualization is now published. Share it by copying the URL or using the embedding-options.

Forest Area in Switzerland

Change over time of the forest area in Switzerland by forest zone.

Forest owners number



■ Switzerland ■ Central Plain ■ Prealps ■ Alps ■ Southern Alps ■ Jura

Filterset: Canton (Switzerland), Type of owner (Type of owners - Total)

Dataset: Forest area in Switzerland, in ha by Year, Forest zone, Canton, Type of owner and Variable

Source: Section economical structures and analysis WSA, e-mail: agrar@bfs.admin.ch

[Download data](#) · Created with visualize.admin.ch



Communication

The option to **create and share** custom visualizations provides your audience with the possibility to **communicate and collaborate** with others regarding the insights found in the data.





Many Thanks!

Don't hesitate to get in touch.

Benjamin Wiederkehr

November 26, 2021

benjamin@interactivethings.com

+41 44 267 66 44

Interactive Things

hello@interactivethings.com