

# How a **strong community** and a **User-Centered Design** approach is key to **.Stat Suite product excellence**

**Laura Belli**

OECD Smart Data Solutions Team

# SIS-CC 15 members and projects around the world



# .Stat Suite, a standard-based, open-source platform



componentised by



...to explore data and develop various reporting and dissemination experiences

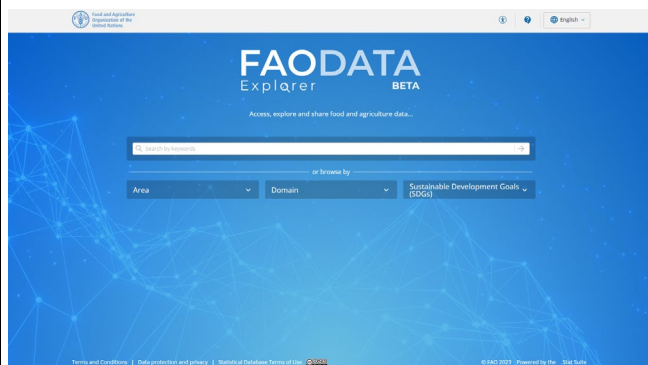


...to manage the data lifecycle for official statistics

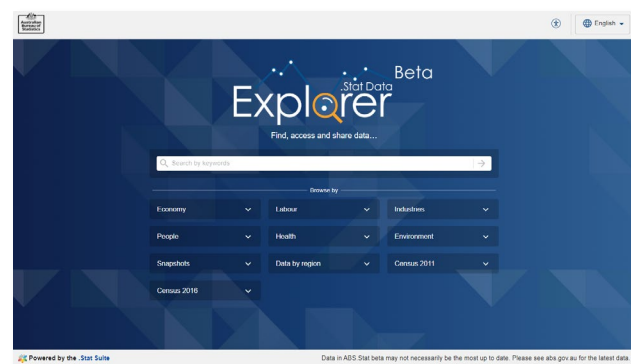


... 'SDMX-native', building on best practices in statistical data modelling.

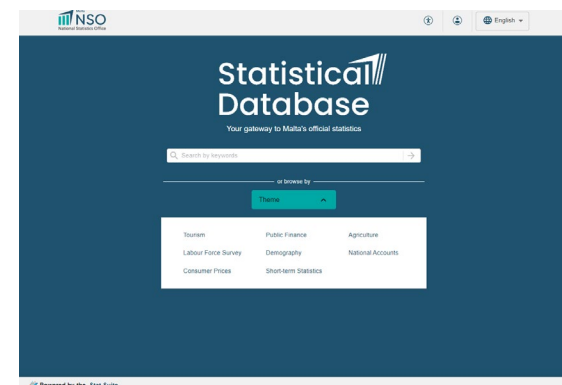
# .STAT SUITE around the world



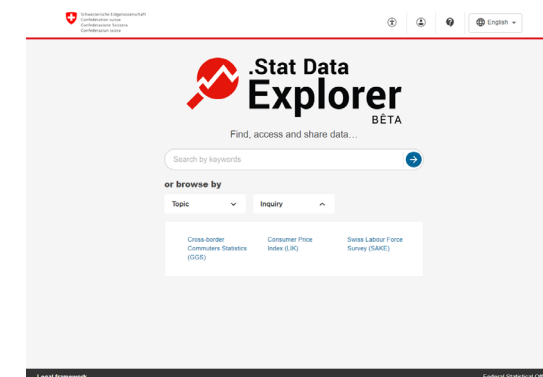
<https://dataexplorer.fao.org/>



<https://explore.data.abs.gov.au/>



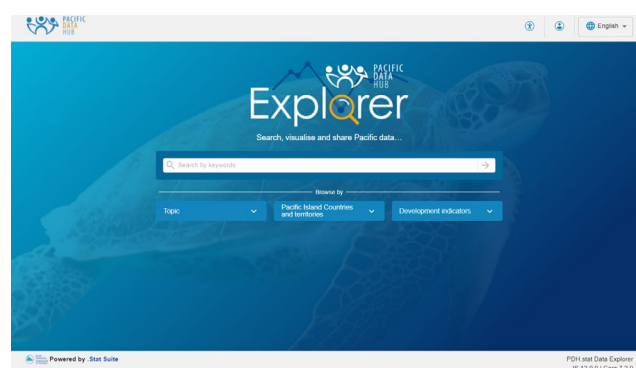
<https://statdb.nso.gov.mt/>



<https://data.bfs.admin.ch>



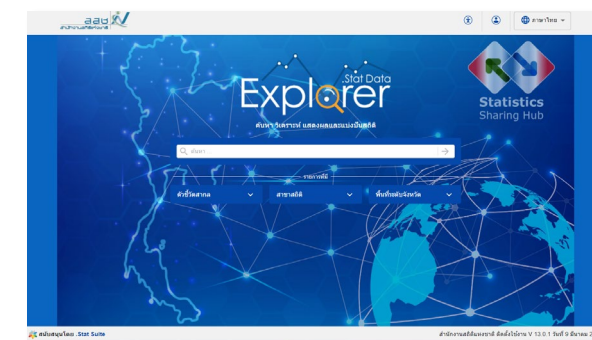
<https://lustat.statec.lu/>



<https://stats.pacificdata.org/>

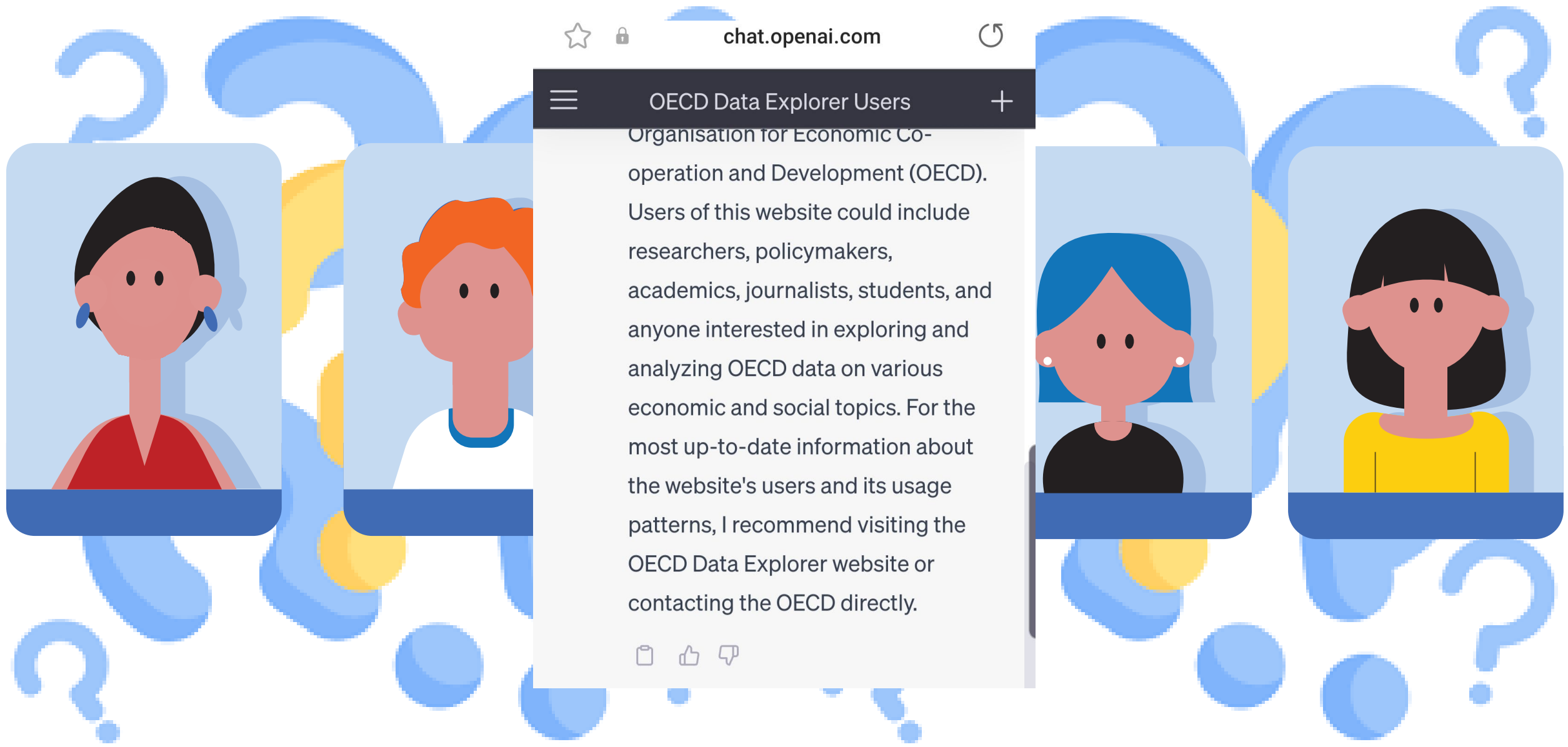


<https://uaestat.fcsc.gov.ae/en>



<https://oshub.nso.go.th/>

# Diverse range of users



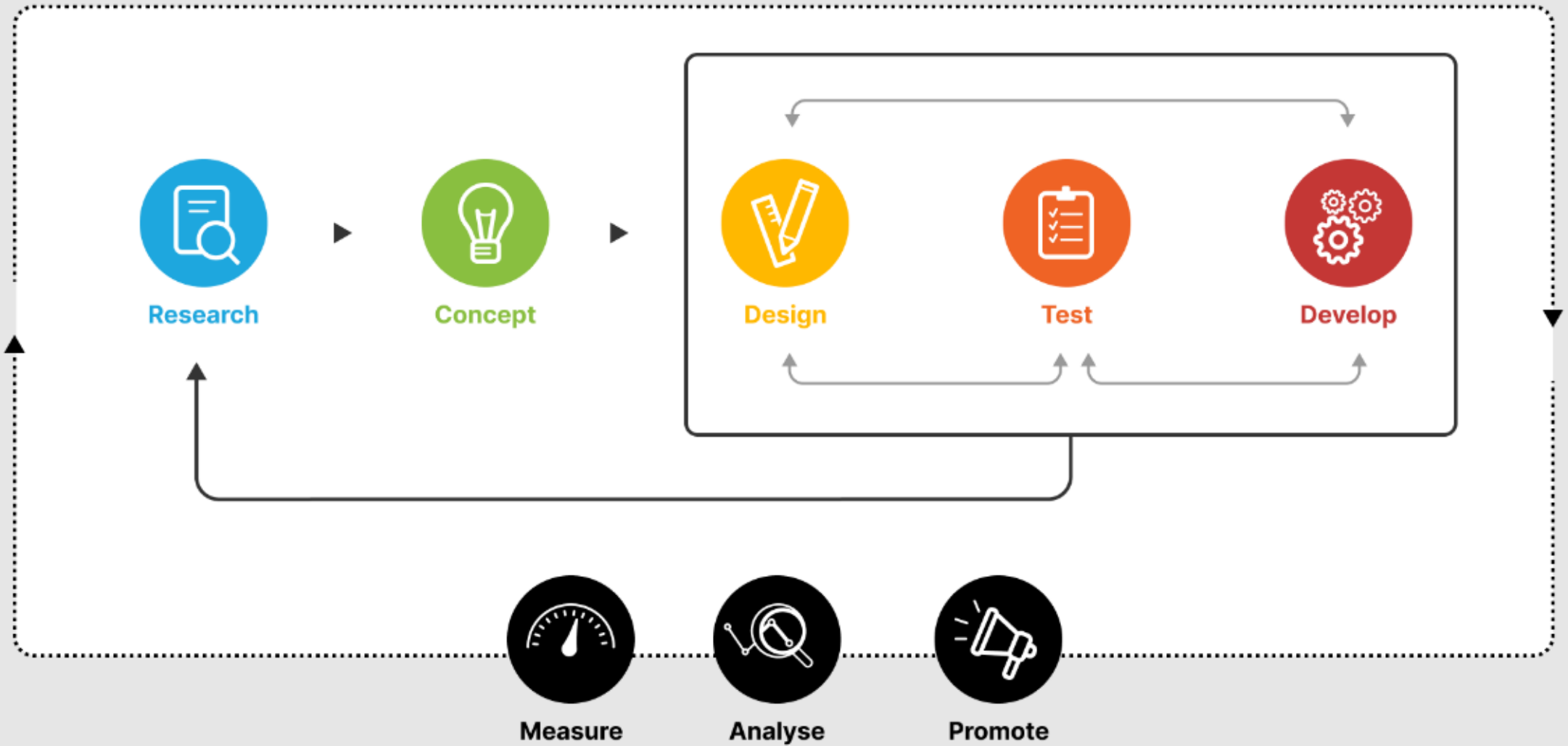
chat.openai.com

OECD Data Explorer Users

Organisation for Economic Co-operation and Development (OECD). Users of this website could include researchers, policymakers, academics, journalists, students, and anyone interested in exploring and analyzing OECD data on various economic and social topics. For the most up-to-date information about the website's users and its usage patterns, I recommend visiting the OECD Data Explorer website or contacting the OECD directly.

📄 👍 👎

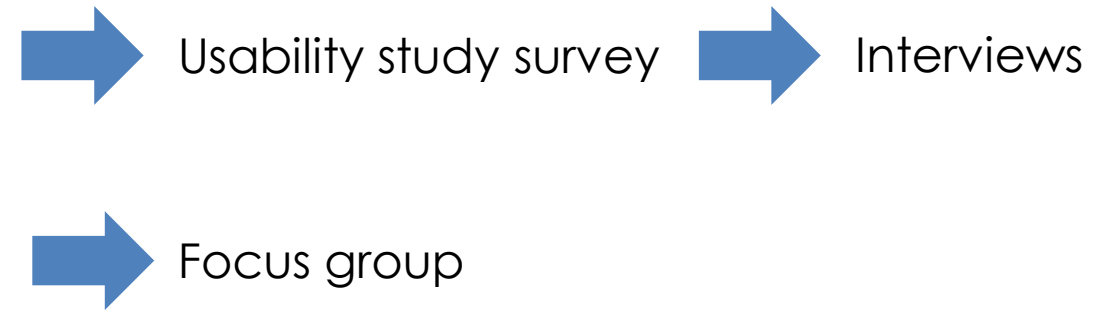
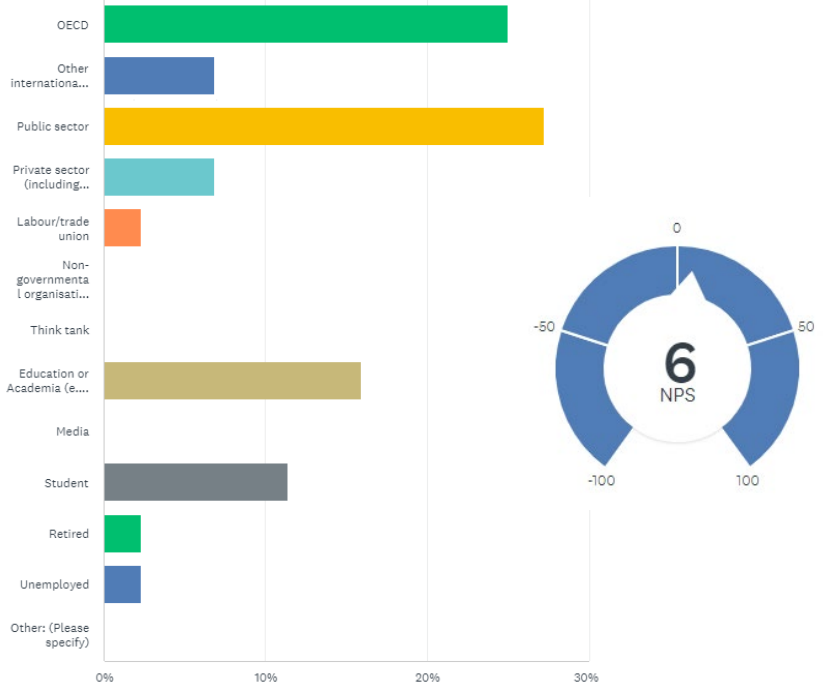
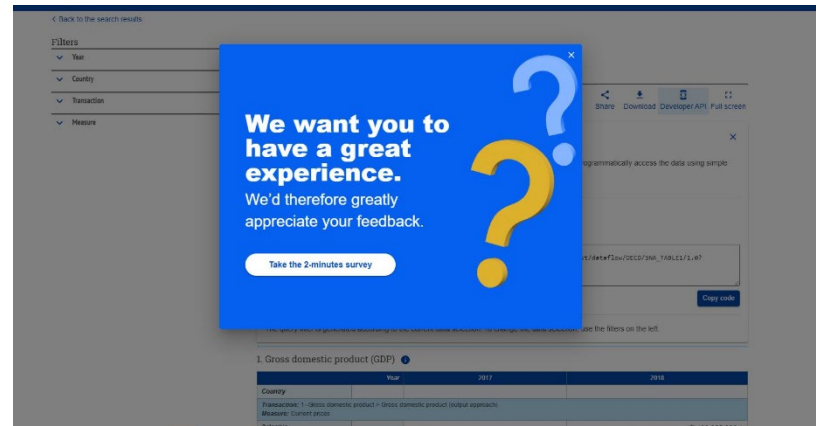
# User-Centered Design approach





# Research

## Pop-up survey





## Research – Focus group satisfaction survey



“

It's great to brainstorm on the required functionalities with other community members

”

“

It is a good opportunity to see all different use cases on the same feature request or enhancements

”

“

It was rewarding and convivial. Input from different perspectives is always a +.

”





# Concept

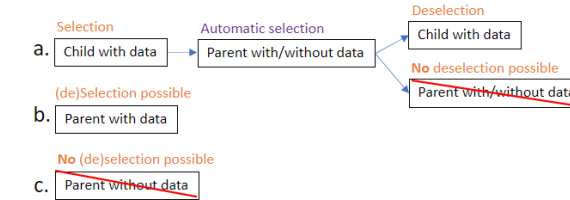
## Define use cases

1. The **data owner defined** an **automated** selection and display of certain hierarchy levels in the table whenever any corresponding child is selected and displayed. Certain hierarchy levels are automatically de-selected when the **user** deselects the corresponding children. A concerned parent can have data or no data.
2. The **data owner did not define an automatic** display of certain hierarchy levels, and thus only items with data and parents of selected items with data can be (de)selected.

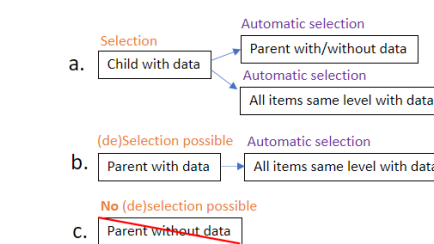
## Define use flows

User action   Machine action   Item

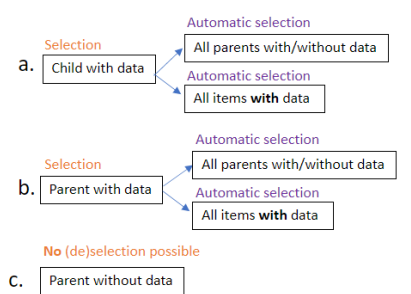
### 1. Default filtering and single item selection mode



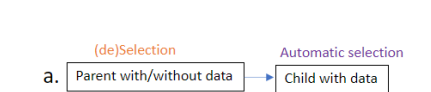
### 2. All items at the same level



### 3. All items



### 4. Whole branch selection mode





## Mock-ups

### Steps

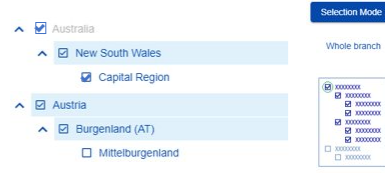
a. The data owner decided to automatically select and display the first level of hierarchy and selected the second level.



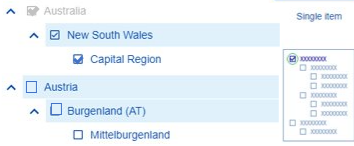
b. The user decides to deselect New South Wales, and this automatically deselects Australia parent with no data.



c. The user goes to advance selection and selects the *Whole branch* mode and selects Australia's branch



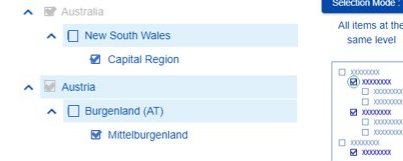
d. The user selects the *Single item* mode and deselects Burgenland automatically deselects Austria parent with data



e. The user selects the *all items* mode and selects Mittelburgenland

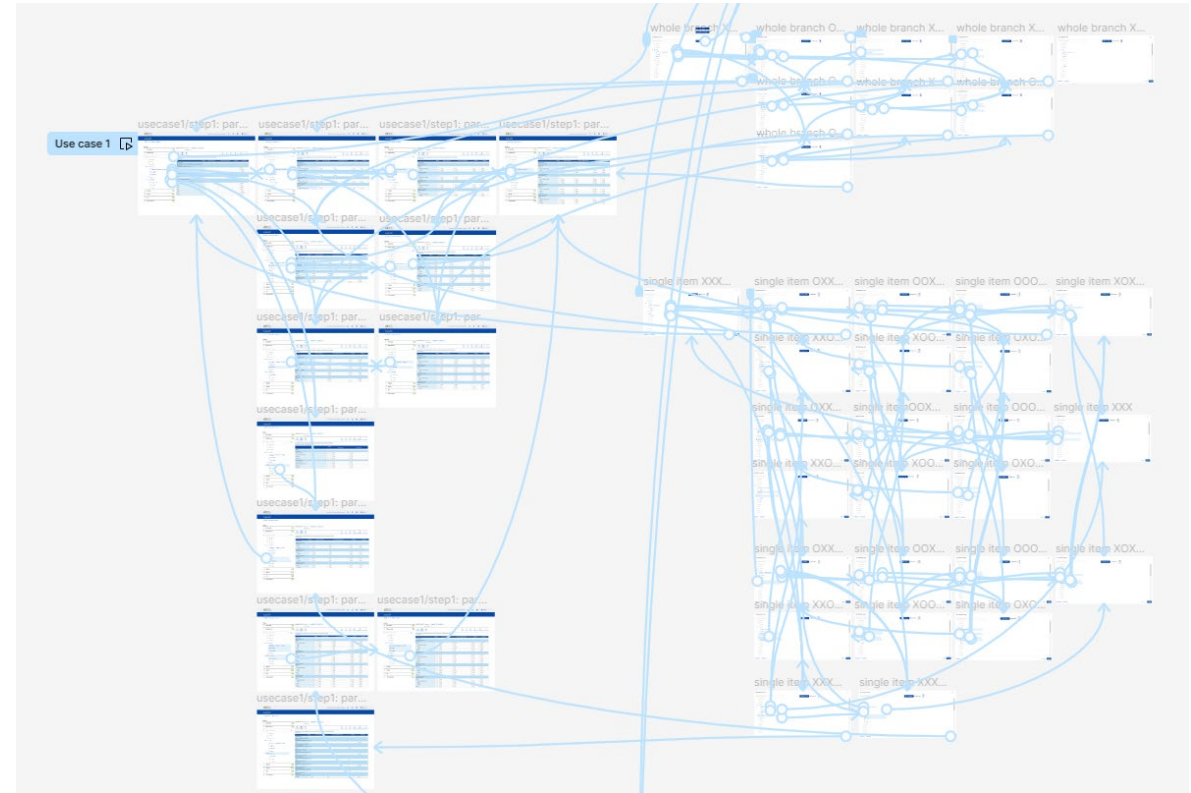


f. The user selects the *all items same level* mode and deselects New South Wales, deselects Burgenland and leave the corresponding parents Australia and Austria



Source: [https://de-qa.siscc.org/vis?ic=en&df%5bds%5d=staging%3ASIS-CC-stable&df%5bid%5d=DF\\_REGION&df%5bag%5d=OECD&df%5bvs%5d=1\\_0&av=true&pd=2020%2C2021&dq=AT11%2BAT11%2BAUT%2BAU103%2BAU101%2BAU1\\_A&to%5bTIME\\_PERIOD%5d=false&vw=tb](https://de-qa.siscc.org/vis?ic=en&df%5bds%5d=staging%3ASIS-CC-stable&df%5bid%5d=DF_REGION&df%5bag%5d=OECD&df%5bvs%5d=1_0&av=true&pd=2020%2C2021&dq=AT11%2BAT11%2BAUT%2BAU103%2BAU101%2BAU1_A&to%5bTIME_PERIOD%5d=false&vw=tb)

## Interactive prototype





# Test – one-on-one interviews

The screenshot shows a data dashboard with a video call overlay. The dashboard displays a table with columns for 'Reference area', 'Measure', and 'Time period'. The video call overlay shows two participants: BELLI Laura, SDD/... and SAMSONOVA An....

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The screenshot shows a data dashboard with a video call overlay. The dashboard displays a table with columns for 'Reference area', 'Measure', and 'Time period'. The video call overlay shows three participants: BB-3120 (SH), LA ROSA ELKAIM..., and BELLI Laura, SD....

The screenshot shows a data dashboard with a video call overlay. The dashboard displays a table with columns for 'Reference area', 'Measure', and 'Time period'. The video call overlay shows three participants: BB-3120 (SH), JEUNG Minju, SD..., and WISTROM B....

The screenshot shows a data dashboard with a video call overlay. The dashboard displays a table with columns for 'Reference area', 'Measure', and 'Time period'. The video call overlay shows three participants: Massicotte, Christi..., and JEUNG Minju, SD....

The screenshot shows a data dashboard with a video call overlay. The dashboard displays a table with columns for 'Reference area', 'Measure', and 'Time period'. The video call overlay shows four participants: BB-3120 (SH), DKHISSI Rachida, ..., BELLI Laura, ..., and SAMSONOVA An....



# Test – Feedback analysis

## Survey feedback



- I prefer the display of the use case 1 that allows better understanding hierarchy
- In case 1, I like the feature that the parent transactions is shown by default even if there is no data for this specific transaction . In case 2, it is good to be able to select.
- Straight forward with Use Case 2. The table and indentation work as expected. Having the option of displaying the parent without observations re-indenting everything perfectly.
- I like the small icons explaining the different section modes.
- In UC1, with the selection mode "Whole branch", I don't understand why "Colombia/Amazonia" are greyed out and cannot be selected.
- In UC1, with the selection mode "all items", when I click on "Apply" directly, I don't get all items. It is needed to select them on the left. Also, when I visualize the data, I cannot deselect some items and I have to go back to the selection mode.
- In UC2, I don't like the long labels with parent label repeated.
- In UC2, when the "automated selection" is disabled the icon could be greyed out.
- Users don't know whether the data manager enabled it or not.
- (however automatic selection of parent when, for example, I am in the single-item selection mode may be confusing).
- Don't like the representation with the > sign
- **Grayed out but with checkbox** if child is selected could be more visible.
- In case 1, it is not obvious you should click on **selection mode** to see the different selection modes appear.
- With Use Case 1, no alt-tag on the **Advance selection mode**, was looking for the identifier. Once you are in the window, you select the mode, one extra step according to me, should have the options displayed instead of having to click on the **Selection Mode** button. Not obvious that once selected, you have to check off the boxes and then Apply, too far apart. But the main thing is that once you chose your selection mode, you loose this mode and it returns to Single item.
- Use case 2: when only on item is selected , then the period appear in column first column named activity

## Interviews observations

Situati on no.	Use Case 1	Use Case 2
1.	Click on Belgium first. Being define by the dataset manager, very weird situation to not be able to click. Found quite easily the advanced selection filter icon	Preference the presentation when we see the hierarchy.
2.		Difficult to identify immediately the hierarchy. Too much information concatenated. No need to repeat the parent for the child (2 dots when Land transport selected; she will clarify with their own examples)
3.	Remark: different behaviour than with the interface (possibility to select the parent)	Raw section is ok for other services activities.
4.	Same behaviour than in the interface. But I am actually selecting also the parent, so maybe single item mode does not mean much now.	
5.	Wouldn't expect that Belgium Colombia be selected. Same problem as above. Why do we get the parent selected? Or Why the other country level is not selected?	
6.	Like the pictures explaining the different cases of the selection mode	



## New design specifications

### Parent with data no (de)selection possible

New layout combinations

Item with data

Active

```
background: default - light;
Color txt: light; #444444
```

Item with data

Hover active

```
background: default - dark;
color txt: light; #444444
```

### Parent without data (de)selection possible

New layout combinations

Item without data

Default

```
background: Neutral lighten-5 (white)
Color txt: light; #444444
```

Item without data

Hover

```
background: default - light
Color txt: light; #444444
```

Item without data

Active

```
background: default - light
Color txt: light; #444444
```

Item without data

Hover active

```
background: default - dark;
color txt: light; #444444
```

## New rules for hierarchical dimension display in the data table

Edit

[Open](#) [Issue created 3 months ago by Laura Belli](#)

As DE user,

I want to see in the data table **all currently selected** (row & column) dimension items in a **clear tree** structure independently from data availability,

**So that** I can more easily understand the hierarchical structure.

This ticket does not apply for charts because empty observations for parents without data cannot be displayed.

### Functional specifications

The related features for selecting items are addressed with these tickets, which are also listed under the epic [Hierarchical selection and table display](#):

- [#414](#)
- [#1041](#)

With these tickets, the **generated SDMX data query** always contains all currently selected dimension items, even those selected parents that do not have data. The table-generating engine can so easily know from the SDMX data query, which items (whether having data or not) were selected.

Only dimension items clearly selected in the filters and included in the SDMX data query are to be displayed in the table, unless there is no selection for the dimension, in which case **all items** (whether having data or not) except children without data, which themselves have no children with data, are being considered as selected.

Parents without data (without observations) should be displayed in the data table with a separate row. Their value cells should be empty instead of `..`, which is still to be used for observations without observation values.

### Examples

#### Example 1: Parent without data auto-selected through ALWAYS\_DISPLAY\_PARENTS annotation

- Children with data selected (on level 3): **Professional, scientific and technical services** and **Administrative and support services**
- Annotation content: `PRODUCT=LEVEL1+LEVEL2`
- Auto-selected parent without data on level 2 displayed in separate row: **Professional, scientific and technical services; administrative and support services**
- When displayed in **rows**

Source: [https://de-qa.siscc.org/vis?](https://de-qa.siscc.org/vis?lc=en&df[ds]=qa%3Astable&df[id]=DSD_NASU%40DF_SUPPLY_T1500&df[ag]=OECD.SDD.NAD&df[vs]=1.0&av=true&pd=2015%2C2015&d...)

`lc=en&df[ds]=qa%3Astable&df[id]=DSD_NASU%40DF_SUPPLY_T1500&df[ag]=OECD.SDD.NAD&df[vs]=1.0&av=true&pd=2015%2C2015&d...&df[vs]=1.0&av=true&pd=2015%2C2015&d...&df[vs]=1.0&av=true&pd=2015%2C2015&d...`

# Co-innovate with the User research Task Force

Create a User research Task Force (UTF) to foster collaboration on User-Centered Design (UCD) principles ensuring highly user focused .Stat Suite products

November



Kick-off

- Establish a vision and mission statement
- Address mutual expectations
- Identify user research activities, opportunities and outcomes
- Set measure of success
- Present digital collaborative workspace

March



Workshop

?

# Audience Live Survey

1. Have you ever been part of a project that implemented a User-Center Design (UCD) approach?

Yes

0%

No

0%

< 1/5 >



Scan the QR code to  
vote or go to  
[https://forms.office.com  
/e/Hiu8Fp5UsK](https://forms.office.com/e/Hiu8Fp5UsK)

**Thank you!**



**[laura.belli@oecd.org](mailto:laura.belli@oecd.org)**