

Assignment 3: dashboard evaluation

Due date: Friday, Nov 25, 2022

The goal of this assignment is to support the assessment of interactive dashboards that are intended to support browsing and exploration so that they help support a back-and-forth conversational interaction with the reader/user. You will have to complete answering this document and fill out the spreadsheet of heuristics with examples from your chosen dashboard.

Now, let's begin. Please completely answer each of the following questions:

1. Pick any interactive dashboard from this list:

Link: <https://powerswitcher.axpo.com>

2. Explain why you picked this dashboard example. For example, was the data something you were interested in?

I have taken the dashboard showing own overview of the development of Switzerland's power supply & understanding the expansion of the solar, wind and other power sources. For micro detailing an adequate power supply month to month is also predicted. And Electricity import is calculated on the based on the demand & supply calculation. This data was interesting because there was many parameters of energy dependency & incorporating the future energy also in supply.

Power Switcher

The Power Switcher gives you your very own overview of the development of Switzerland's power supply. You decide whether and to what extent solar, wind and other power sources will be used in the future – and you're challenged to ensure an adequate power supply month to month. Use the sliders at the bottom left to configure the expansion of photovoltaics, electricity imports and more. In the illustrations at the bottom right, you can see right away whether you could supply Switzerland with the settings you have chosen. Does the light go out or stay on? It's up to you!

Share the Power Switcher



Adjust Settings

Scenario ⓘ

Choose a future scenario for Switzerland

Axpo

Energy perspectives 2050+

Current Expansion Speed

National Councillor Grossen

National Councillor Nordmann

Former National Councillor Rechsteiner

Helion

The Axpo scenario: significant increase in demand due to sector coupling, expansion of renewable energies, efficiency gains, gas-to-power and imports.

Key Results

0
Number of years with an electricity deficit ⓘ

7.3 TWh

Maximum electricity imports in winter ⓘ

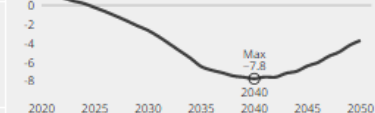
7.3 TWh

Maximum thermal production in winter ⓘ

2050: -3.7 Mrd. CHF

Debt level ⓘ

Mrd. CHF



power price 70 CHF/MWh ⓘ

30 CHF

110 CHF

Annual electricity mix ⓘ

Winter (Oct-Mar)

Whole year

Summer (Apr-Sep)

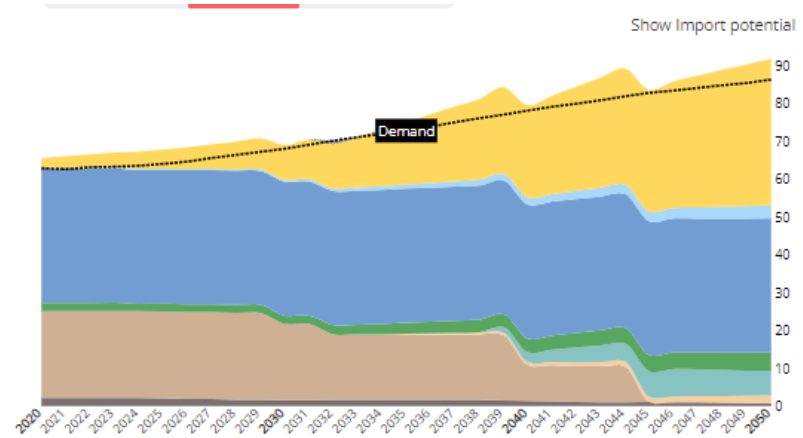
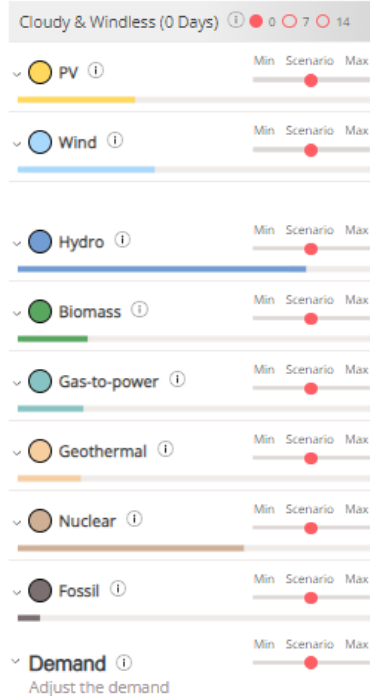
Show Import potential



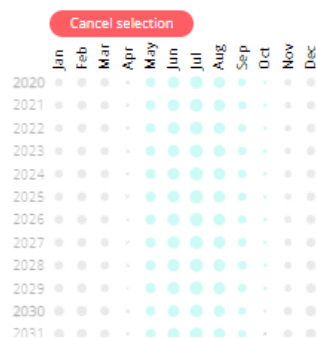
renewable energies, efficiency gains, gas-to-power and imports.

Capacity ⓘ

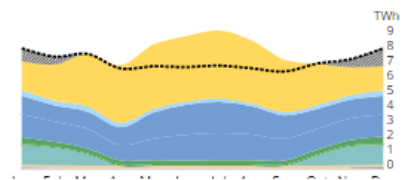
Adjust the power plant capacities



Electricity deficit or surplus ⓘ



All months 2050



3. Go through each heuristic in the spreadsheet provided (Heuristics exercise.xlsx) and answer each row based on your example in detail. Visuals and screenshots of specific parts of the dashboard relevant to the heuristic are highly encouraged.

Answer is attached in Excel.

4. Were the heuristics useful? How? Which ones in particular? Explain in detail.

Yes, the heuristics were very helpful. There were many heuristics that I was not aware that is a criteria for dashboard critiquing. These are a few important heuristics that I found interesting and new:

Yeah, heuristics questions were useful in critiquing the selected dashboard. There are some questions which seems curious to answer were:

- Sequence & logical order of charts to represent in the dashboard.
- Dead end for function and dashboard.
- Icons placement & representation in the dashboard plays important role.

5. Were any of the heuristics not helpful or confusing to you? If so, please elaborate.

I could not understand following heuristics question which were quite ambiguous to me in understanding so, I was not able to answer following questions.

- There are text and visual elements to frame or guide salient information. -
- There is a clear path and breadcrumbs for user actions within the dashboard. – How to use breadcrumbs in the dashboard context since it give overall view of the dataset.

- The dashboard communicates a certain style or mood to the user. – Which kind of style or mood usually better to follow that I am not aware.
- The dashboard should disclose any biases. These can include the author's personal biases, design biases, and/or biases in the data. – Here what kind of biases is asked and in which context couldn't get

6. Did any of the heuristics make you think of dashboard design in a new way?

Icons can be added in the current dashboard to showcase the energy capacity, other attributes in the dashboard seems logical.

7. Were there any heuristics that you thought were missing?

Yeah,

- Which different kind of illustrations are used to describe the graphs.
- Were the overall statistics data used to describe the salient features of the dashboard.
- Which kind of color encoding used in the dashboard

8. What changes would you make to the dashboard based on this assessment? Please describe in detail.

Annexure needs to be there to select the appropriate selection for the dashboard. Legend should be there on the axes. Another type of chart can be use to have showcase the capacity, where baseline is same to find the increment or decrement over the year.