



**University of  
Zurich** <sup>UZH</sup>

Science IT

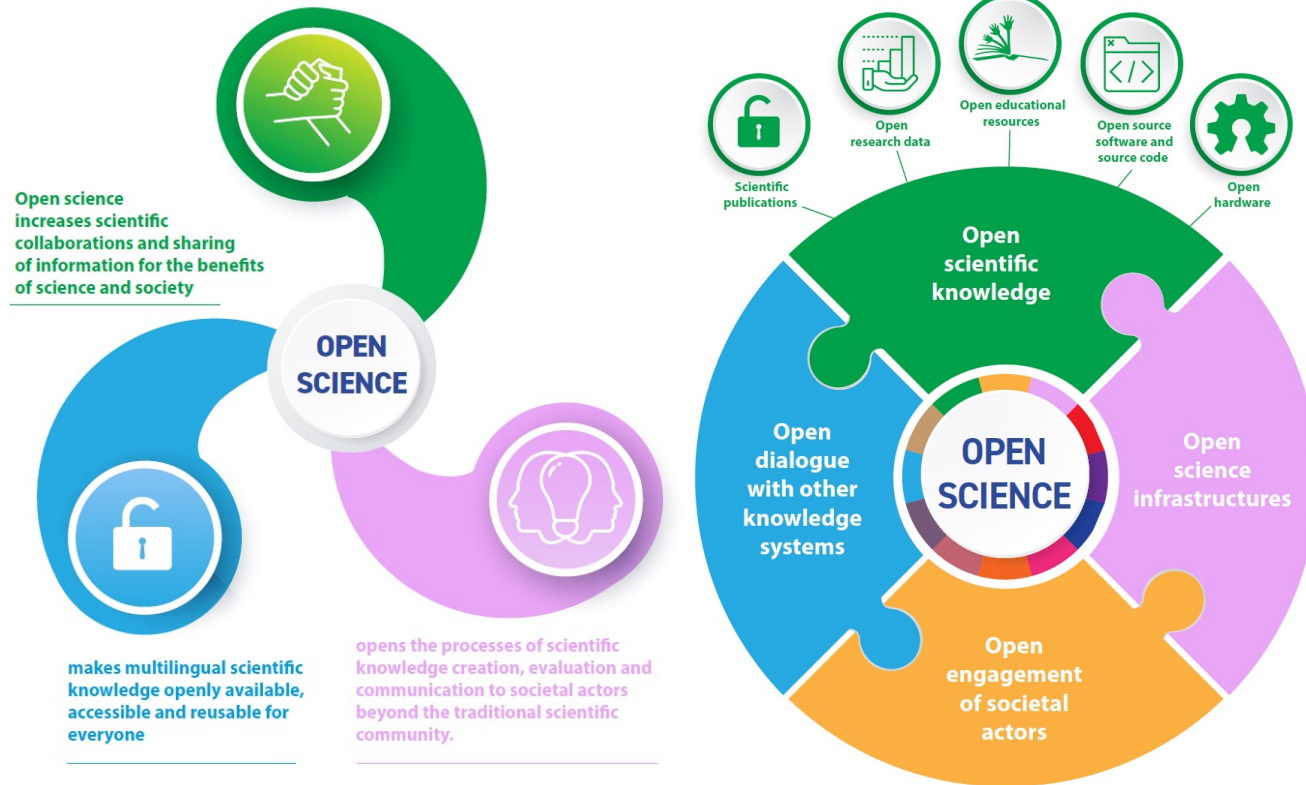
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# Publishing Research with inseri core for WordPress

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Coffee Lectures Unitobler+ interdisziplinär @ Uni Bern  
5 March 2024

# Open Science



## IV. AREAS OF ACTION

16.f. page 21

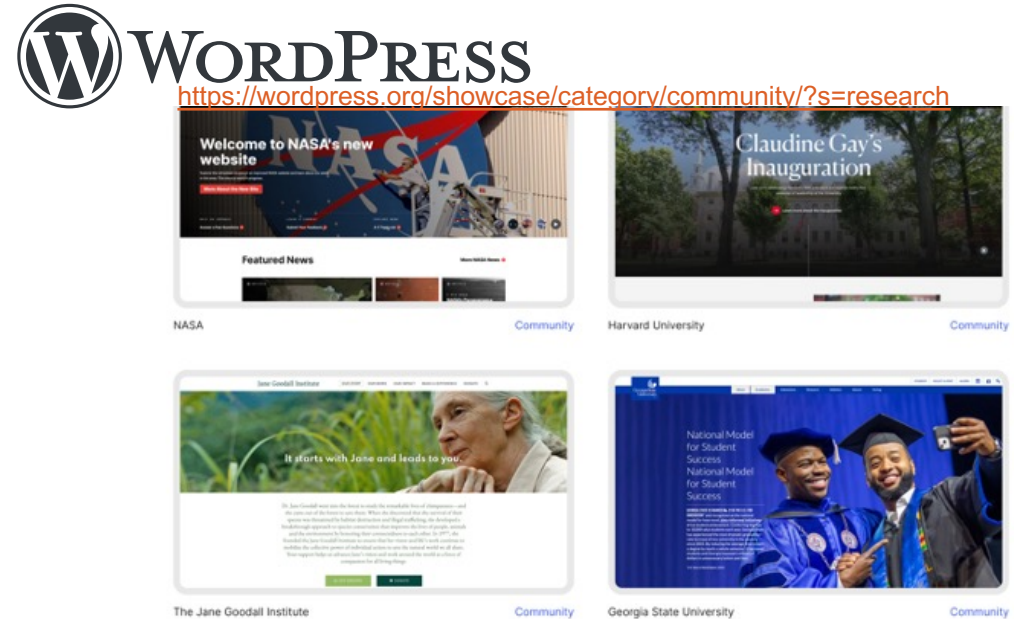
*“Enhancing open **science communication** to support the dissemination of scientific knowledge to scholars in other research fields, decision makers and the public at large.”*

United Nations Educational, Scientific and Cultural Organization (UNESCO) Recommendation on Open Science (2021) [CC BY-SA 3.0 IGO](#)  
DOI: [10.54677/MNMH8546](https://doi.org/10.54677/MNMH8546)

# Open Science Communication: Websites and Blogs

Modern **online publication format** to facilitate **open science communication**

1. **Easy-to-use** (low-code/no-code)
2. **Transdisciplinary**
3. **Easy to operate** and **sustainable** (potentially part of the services provided by the central IT)



“WordPress is web publishing software you can use to create a **beautiful website or blog**. We like to say that WordPress is both free and priceless at the same time.”

“WordPress is more than a **publishing platform**. ...”

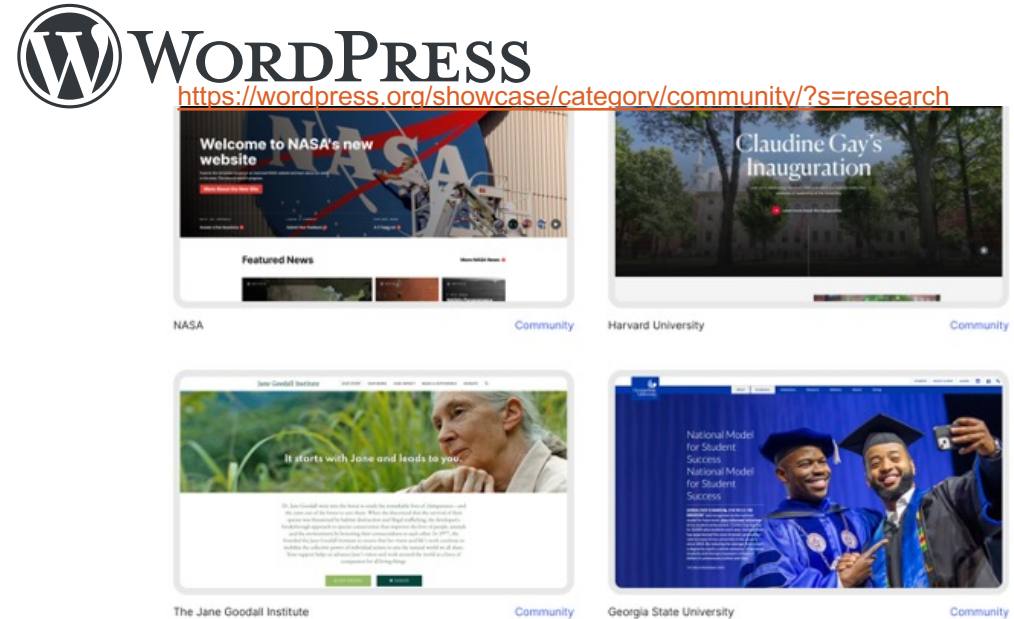
- \*)WordPress is, by far, the most used Content Management System (62.8% market share)
- \*)43.2% of all websites are WordPress
- WordPress is an established blogging platform in the academic environment

\*) Source: <https://w3techs.com/technologies/details/cm-wordpress>

# Why inseri.swiss?

Modern and **interactive online publication format** to facilitate **open access** and **open science communication**

1. **Easy-to-use** (low-code/no-code)
2. **Transdisciplinary**
3. **Easy to operate** and **sustainable** (potentially part of the services provided by the central IT)
4. **Interactive** and **executable** modern **web content**
5. **Open** and **citable**
6. **Reuse and re-mixing** of publicly funded research outputs (open access)



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# inERI.swiss Project

## inERI.swiss - connecting data repositories, research methods, and researchers

- swissuniversities project (2021– 2024) *Programme Open Science – Setting up of shared services & e-infrastructures*

### Main Goal

- **business plan** for a sustainable service
- required software extensions based on use cases

### Partners:

- Universität Zürich: Science IT (leading house)
- Universität Bern: Digital Humanities Dep. + Science IT Support (SciTS)
- Universität Basel: DHLab
- Central Library Zürich: ZH-Lab
- Foundation Archives Jean Piaget
- EnhanceR

# Use Cases

## Creation of own website for research output

- Complement traditional research output (PDF publication) with a Web format

## Interactive online tool

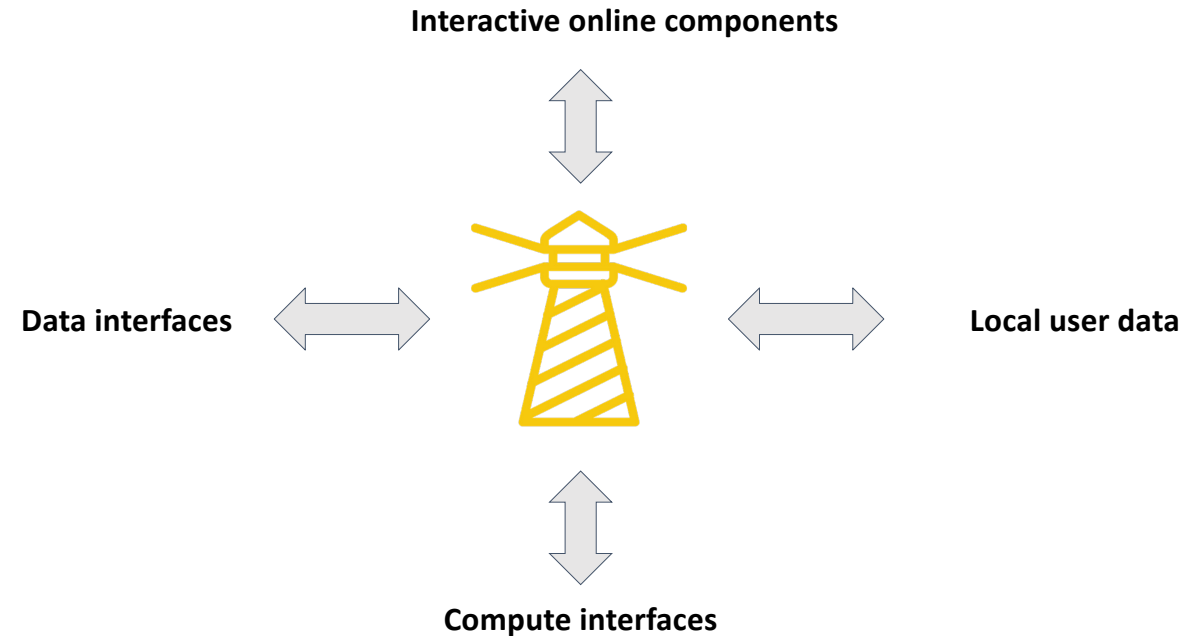
- Visualisation components
- Ease to reuse (also with own data)

## Data reuse and integration with data sources

- Reuse open published data with previously published online tools

## Data analysis / simulation

- No need to set up the computational environment
- Runnable and Reusable without going into the details of the programming language used for the analysis



# WordPress Gutenberg Editor – Building with Blocks

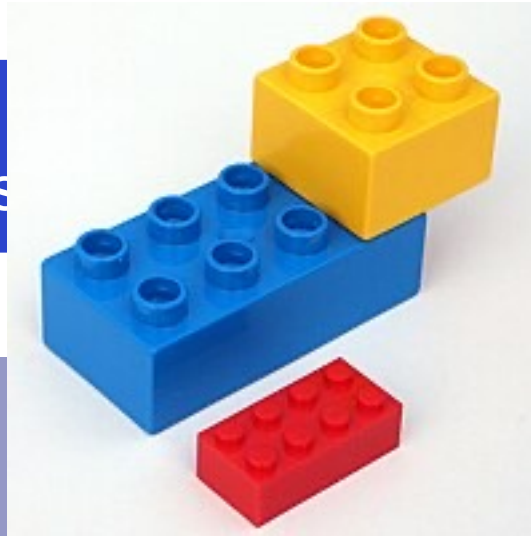
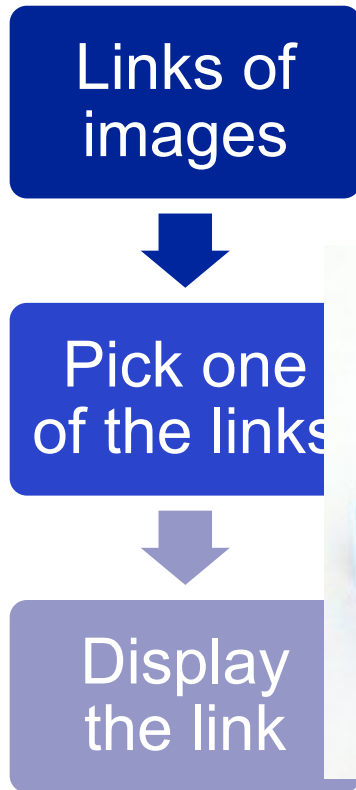
The image shows the WordPress Gutenberg editor interface. On the left is the 'List View' sidebar, which displays a hierarchical structure of blocks: Cover, Cover, Group, Columns, Column, Group, and another Group. The selected block is 'Give your... be-...', which is highlighted in blue. Below it are options for Spacer, Paragraph, Columns, and another Spacer. Further down, there are options for Column and another Column. At the bottom of the sidebar, there are several 'Cover' blocks.

The main editor area shows a preview of a page with the heading 'creativity a head start.' Below the heading is a block toolbar with icons for copy, list, indent, H2, bold, italic, link, and a menu icon. The text below the toolbar reads: 'Beautiful content doesn't have to be designed from scratch. Patterns are collections of pre-arranged blocks you can assemble to make your content impactful, meaningful and appealing.'

Below the text is a 'Block Pattern Directory' button and a 'Learn how to create patterns' button. To the right of the text is a grid of various block patterns, including 'Vintage Vase', 'Art & Beauté', 'Opening Party', 'Hello.', 'Forest.', '404', 'Par Mountain', 'HELLO OLIVIA', 'Peach Blossom', and 'MERLIN FORETELLS'.

# WordPress Gutenberg – Building with Blocks

## inserti – Building with Blocks that enable the Interactivity



```
1 [
2   {"label": "UZH Acronym", "value": "https://www.cd.uzh.ch/cd/dam/jcr:31f38b33-1619-4ba1-a21c-4dae47e9d0e5/UZH-Logo-Akronym.2020-01-15-11-51-14.gif"},
3   {"label": "UZH Logos", "value": "https://www.cd.uzh.ch/dam/jcr:79ffe4ce-bbe9-498e-94a8-d7d5b66400b2/UZH_logo_pos_d_e.gif"}
4 ]
```

Choose an item

 ×

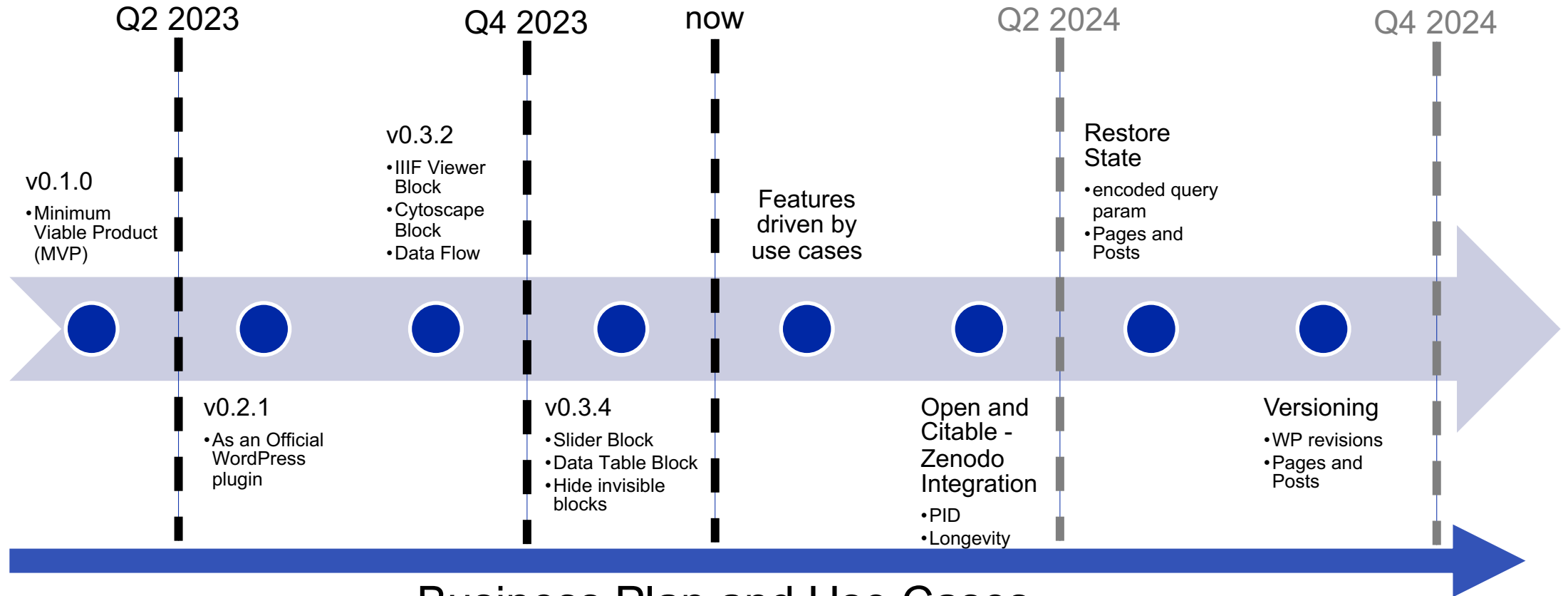
- UZH Acronym
- UZH Logos

**UZH**

[Live example](#)



# Roadmap



## Business Plan and Use Cases

- Business Model
- Collect Use Cases
- Marketing – Present inseri.swiss to/during
  - Science IT Units from other universities
  - UZH Units
  - Open Science events
  - ...

# Status

## insemi core Blocks:

- Text Editor: Write JSON, XML, HTML, ...
- Text Viewer: View JSON, XML, HTML, ...
- Local File Import: Let visitor import local data
- Download: Let visitor download block data
- Dropdown: Provide options to choose from
- HTML Code: Render HTML code
- Image Box: Display image
- Media Collection: Load file from media library
- Plotly Chart: Create interactive charts with plotly.js
- Python Code: Run Python code (via Pyodide)
- Web API: Load data from a Web API
- Zenodo Repository: Load data from Zenodo.org
- IIIF Viewer: View content based on IIIF manifest
- Cytoscape: Display graph data using Cytoscape.js
- Slider: Select a value or a range
- Data Table: Display tabular data

## insemi core Features:

- Data Flow: Visualise the dependency between the insemi blocks
- Block Duplication (Copy & Paste): copy the dependency between the blocks
- Hide Invisible Blocks: What You See Is What You Get

## Public Presence:

- Project information – [insemi.swiss/about](https://insemi.swiss/about)
- Examples and showcases – [insemi.swiss](https://insemi.swiss)
- Documentation – [docs.insemi.swiss](https://docs.insemi.swiss)
- Ideas and Questions – [GitHub Discussions](https://github.com/insemi/swiss/discussions)
- insemi Playground – [insemi.swiss/playground](https://insemi.swiss/playground)

# Use Cases and inseri core Blocks examples

## Creation of own website for research output

- WordPress

## Interactive online tool

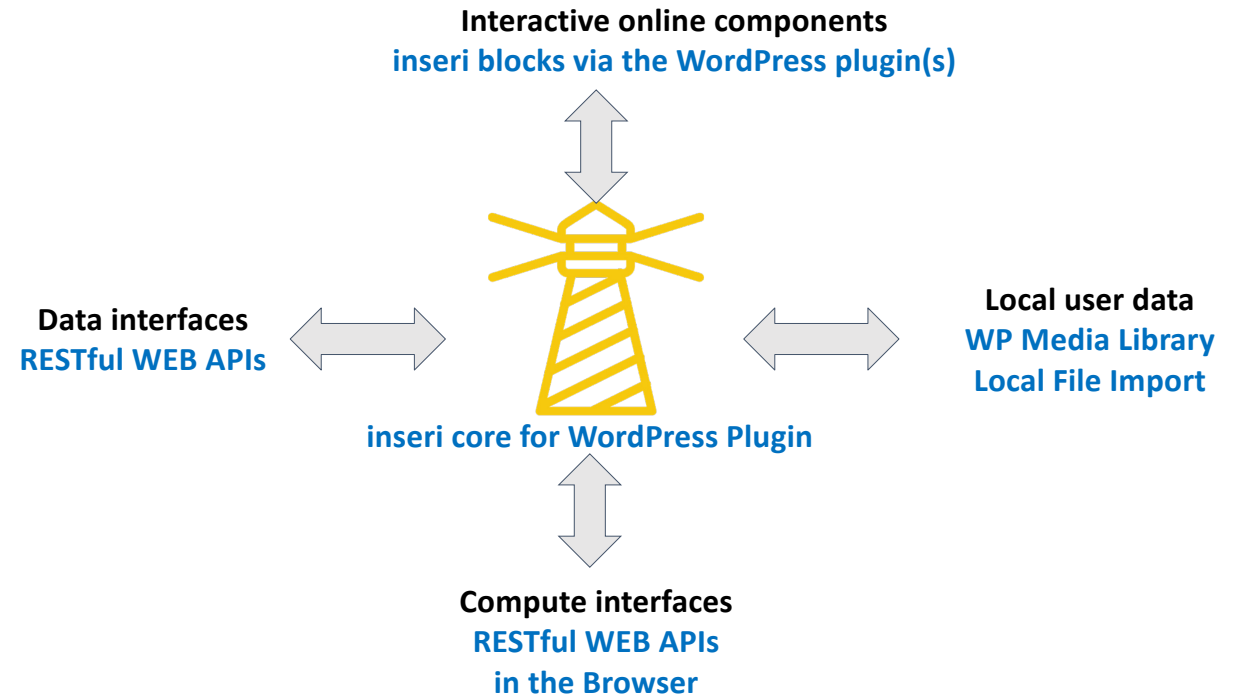
- [Text Editor](#) and [Text Viewer](#)
- [IIIF Viewer](#)
- [Plotly Chart](#)
- [Data Table](#)
- [Slider](#)

## Data reuse and integration with data source

- [Zenodo Repository](#)
- [Local File Import](#)
- [Media Collection](#) (might not be FAIR)
- [Web API](#)

## Data analysis / simulation

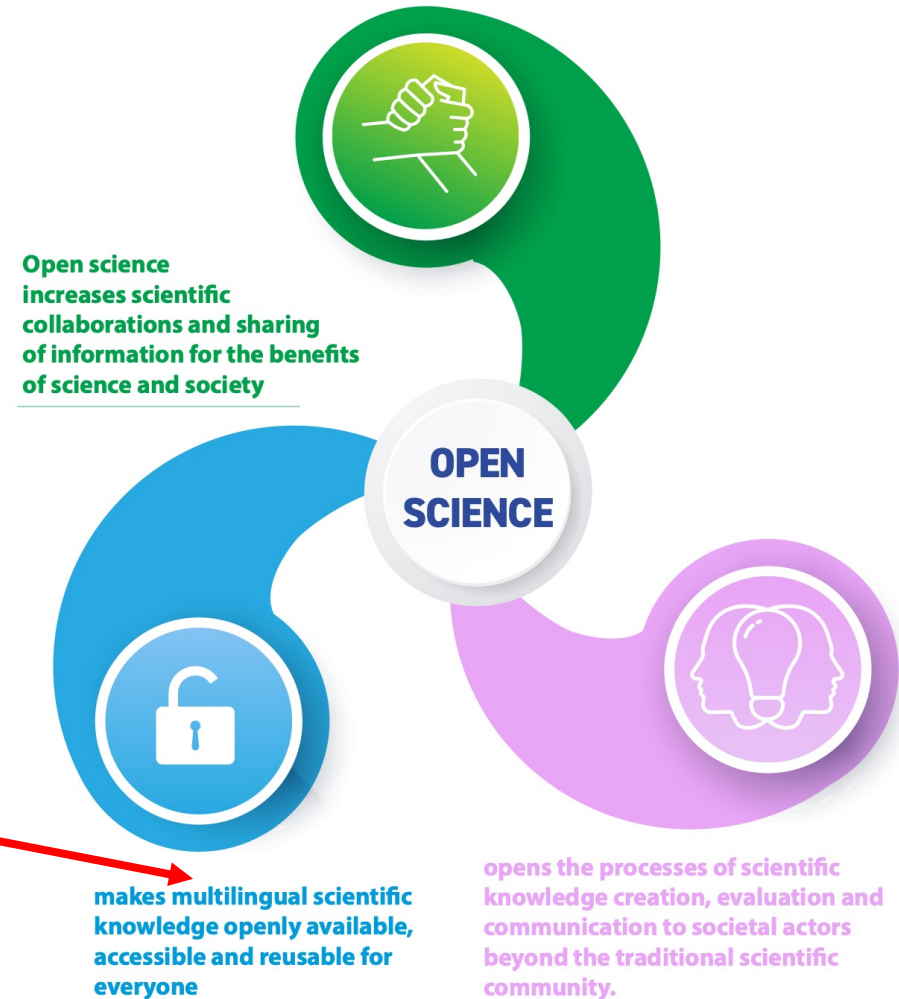
- [Python Code](#) and [Web API](#)



# WordPress Long Term Roadmap - [here](#)

## The Four Phases of Gutenberg

1. **Easier Editing** — Already available in WordPress, with ongoing improvements (**2018 – WordPress 5.0**)
2. **Customization** — Full site editing, block patterns, block directory, block themes (**2019-2023**)
3. **Collaboration** — A more intuitive way to co-author content (**starting in 2023**)
4. **Multi-lingual** — Core implementation for Multi-lingual sites (**tbd**)



# Thanks and Questions



- Do you want to be an **early adopter (higher education institution)**?
- Do you plan to use inseri for your **research project**?
- Are you interested in a future **collaboration** in the context of **open science**?

Contact us at [inseri-contact@s3it.lists.uzh.ch](mailto:inseri-contact@s3it.lists.uzh.ch)

Source: <https://www.lego.com/de-ch/service/buildinginstructions/45028>