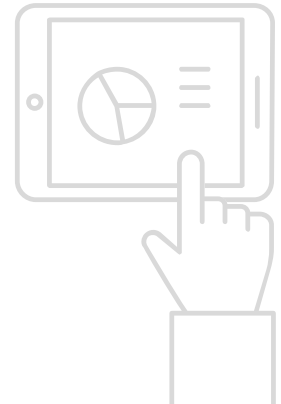
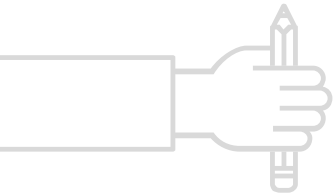




# Jupyter.org Redesign

Heuristic Evaluation & Competitive Analysis



# Executive Summary

Project Jupyter is the industry leader for open source interactive computing. To evaluate the effectiveness of Jupyter.org, we performed a heuristic evaluation of the website and a competitive analysis against the websites of similar products: Azure Notebook, Mathematica, MATLAB, ObservableHQ, SageNotebook, and RStudio.

We found that **Jupyter.org is doing a number of things well**, including providing a breadth of useful and detailed information, establishing credibility, and offering user flexibility, feedback, and ease-of-use.

But some **areas of improvement** that we found include minor bugs, some design inconsistencies, and missing CTAs. For a potential redesign, we may also want to consider reducing copy, incorporating more visuals and interactive elements, reinforcing the brand's prestige, and directly addressing target users and their needs.

# Purpose of Jupyter.org

*The website should guide and inform individuals, organizations, contributors and sponsors about Project Jupyter's core values, technology, and community.*

Jupyter.org should help guide visitors to the appropriate Jupyter-related projects or documentation. Users should be able to confidently navigate to a related page that increases their ability to solve problems with open source interactive computing.

# Heuristic Evaluation

A heuristic evaluation is used to identify a website's strengths and weaknesses and benchmark against certain design principles. These insights help inform how the user experience can be improved and how to motivate user engagement.

## *Industry Standard Design Principles*

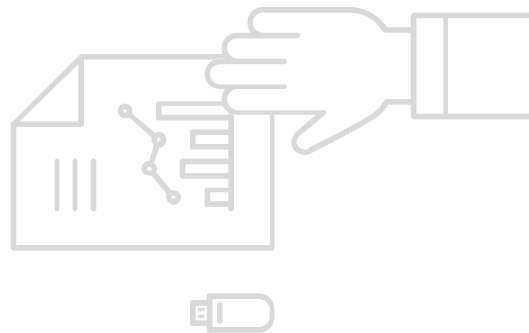
- Nielsen's Heuristics
- Morville's Usability Honeycomb
- Schneiderman's 8 Golden Rules





# Jupyter.org Strengths

- Useful and Detailed Information
- Establishes Credibility
- Flexibility and Ease-of-Use
- User Feedback





# Jupyter.org Weaknesses

- Multiple Bugs
- Design Inconsistencies
- Missing Calls-to-Actions
- Text-Heavy Content



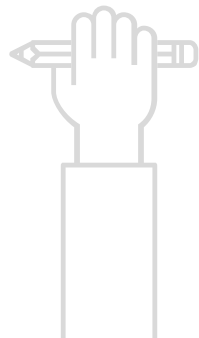
# Competitive Analysis

A competitive analysis involves researching and analyzing key competitors to gain an understanding of the broader consumer marketplace and evaluate the usability and effectiveness of competitors' websites.

**Direct Competitors:** offer a similar value proposition to the same target users.

**Indirect Competitors:** offer a similar value proposition to different target users.

**Influencers:** offer innovative products or approaches in the industry.



# Direct Competitors

<p>Azure Notebook</p> <p>A free online access to Jupyter notebooks in the cloud</p>	<p>ObservableHQ</p> <p>A notebook environment for Javascript</p>
<p>RStudio</p> <p>An open-source statistical computing environment for R</p>	<p>SageMaker</p> <p>Uses Jupyter notebooks for machine learning</p>





## Strengths

### Azure Notebook

- Use of graphics and minimal text
- Simple call-to-action

### ObservableHQ

- Use of white space and illustrations
- Clear instructions and interactivity

### RStudio

- Easy-to-navigate
- Compelling and engaging visuals

### SageNotebook

- Differentiation of benefits
- Visualizations that auto-play



## Weaknesses

### Azure Notebook

- Multiple bugs
- Lack of product instructions

### ObservableHQ

- Navigation changes on every page
- No context for notebook collection

### RStudio

- Free version is under-promoted
- No invitation to join/interact with community

### SageNotebook

- Altering colors and font sizes
- Hard-to-read testimonials

# Indirect Competitor

Mathematica

A proprietary technical computing system

# Influencer

MATLAB

A proprietary numerical computing environment



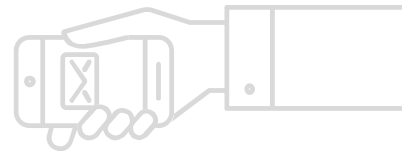
# Strengths

## Mathematica

- Touts credibility and prestige
- Multimedia content

## MATLAB

- Concise tagline
- Directly addresses target audiences





# Weaknesses

## Mathematica

- Content-heavy homepage
- Multiple navigation menus

## MATLAB

- Cluttered calls-to-action
- Competing descriptions of product benefits



# Insights

There are a number of positive design elements that Jupyter.org may want to consider borrowing from its competitors, such as incorporating **more visuals** and interactive elements, **reducing copy**, touting the brand's **prestige**, and directly addressing **target users** and their needs.

But competitors are facing the same issues as Jupyter.org—bugs, design inconsistencies, missing calls-to-action, and text-heavy pages—as well as myriad other issues, including poor navigation, illegible content, competing benefit descriptions, and a lack of instructions.

# Next Steps

We will be conducting semi-structured interviews with key stakeholders and contributors, as well as users and non-users, in order to gain deep qualitative insights regarding Project Jupyter's position in the marketplace and the various user needs that the website must address.