User Experience Survey: Jupyter Notebook (2015)

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#### SURVEY QUESTIONS

- How often do you use Jupyter Notebook?
- Roughly how long have you been using Jupyter Notebook?
- How do you run the Jupyter Notebook?
- Select all the words that best describe Jupyter Notebook.
- What is your primary role when using Jupyter Notebook?
- How many years have you been in this role?
- How many people typically see and or interact with the results of your work in Jupyter Notebook?
- What, if anything, hinders you from making Jupyter Notebook an even more regular part of your workflow?
- What tools and applications, if any, would you like to see more tightly integrated with Jupyter Notebook?
- What needs in your workflow does Jupyter Notebook address?
- What needs in your workflow does Jupyter Notebook NOT address?
- What aspects of Jupyter Notebook make it pleasant to use in your workflow?
- What aspects of Jupyter Notebook make it difficult to use in your workflow?
- What new features or changes would you like to see in Jupyter Notebook? Please list anything that comes to mind that helps you in your workflow, big or small.
- Thinking back to when you first started using Jupyter Notebook, what enhancements would you have made to make your initial experience better?
- What industries does your role and analytical work support? E.g. Journalism, IT, etc.

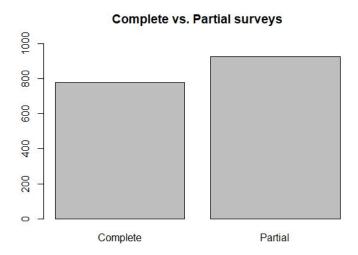
#### For more information:

https://www.kaggle.com/jupyter/2015-notebook-ux-survey

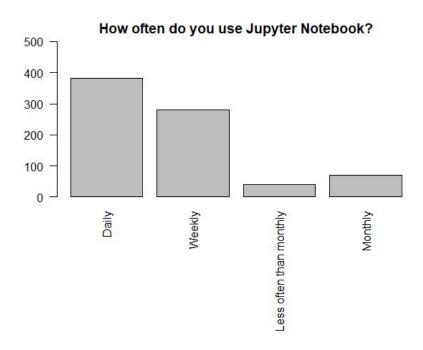
#### **ANALYSIS & RECOMMENDATIONS**

#### **Status**

There were 779 completed surveys and 927 partially completed surveys. Partially completed surveys were removed to avoid potential confounds.

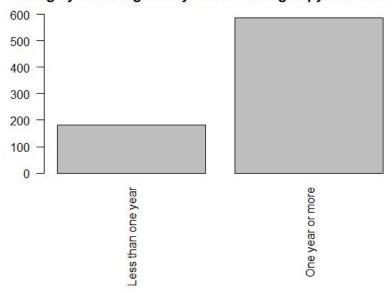


#### How often do you use Jupyter Notebook?



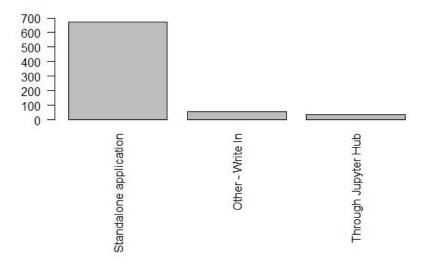
## Roughly how long have you been using Jupyter Notebook?

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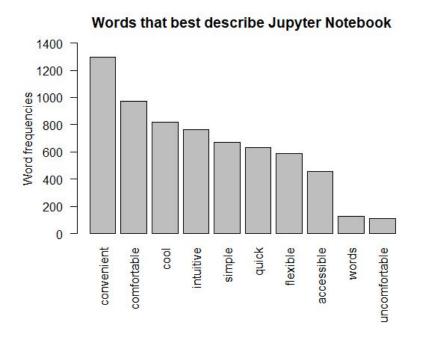


# How do you run the Jupyter Notebook?

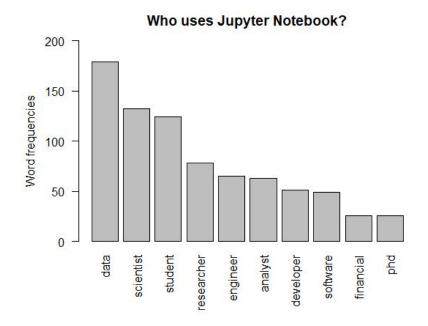
#### How do you run the Jupyter Notebook?



## Select all the words that best describe Jupyter Notebook.

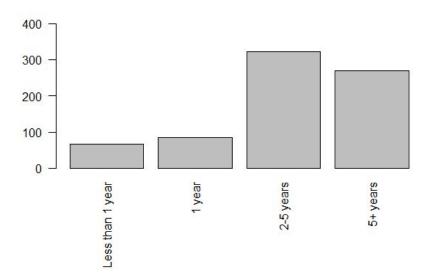


#### What is your primary role when using Jupyter Notebook?



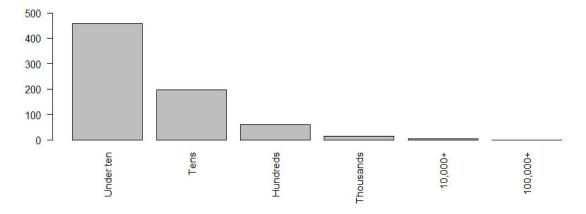
## How many years have you been in this role?

#### How many years have you been in your role?

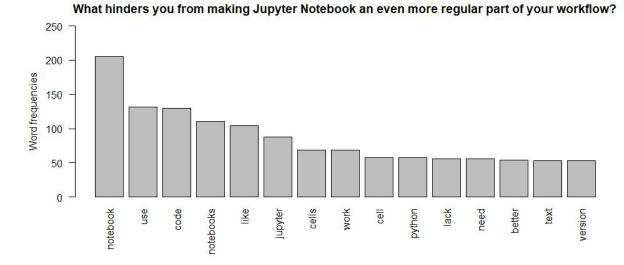


# How many people typically see and/or interact with the results of your work in Jupyter Notebook?

#### How many people typically see and or interact with the results of your work in Jupyter Notebook?



What, if anything, hinders you from making Jupyter Notebook an even more regular part of your workflow?



Themes associated with "lack":

- Lacks debugger
- Poor text editor
- Lacks cut and paste function between notebooks
- Lacks version control

Themes associated with "need":

- Needs version control
- Notebook is simply not needed as a regular part of the workflow

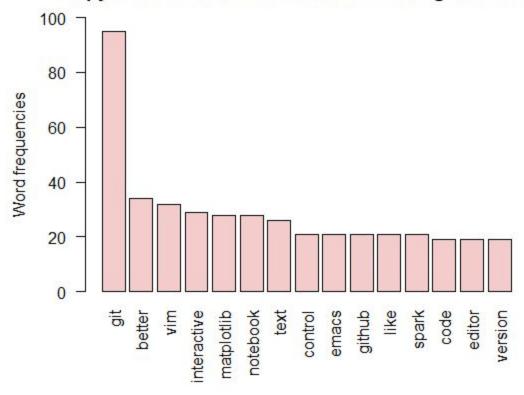
Themes associated with "difficult":

- Difficult to collaborate
- Version control
- Difficult to manage code cells

Recommendations: Improve version control and text editor

What tools and applications, if any, would you like to see more tightly integrated with Jupyter Notebook?

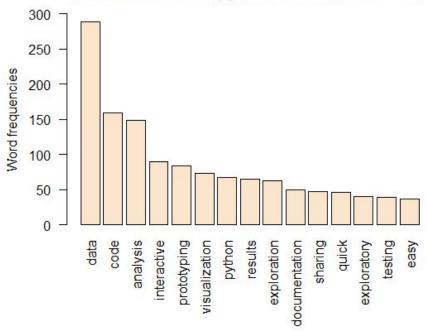
# Jupyter Notebook users want better integration with:



Recommendations: Improve integration with git, vim, matplotlib, emacs, github, and spark

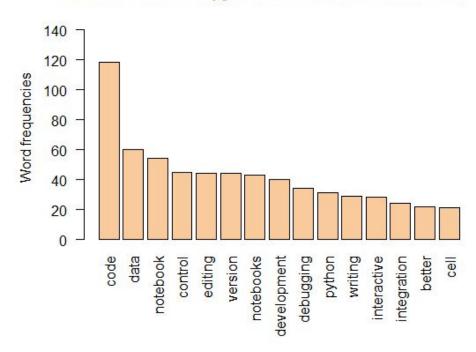
# What needs in your workflow does Jupyter Notebook address?





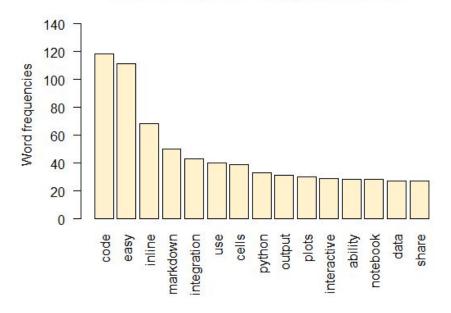
What needs in your workflow does Jupyter Notebook NOT address?

## Workflow needs Jupyter Notebook does NOT address:

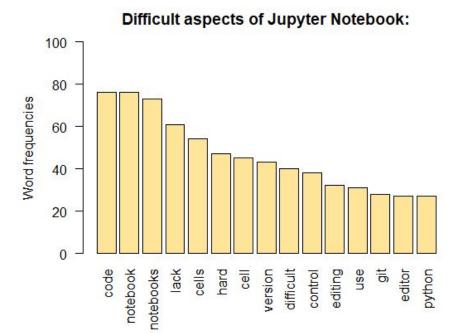


# What aspects of Jupyter Notebook make it pleasant to use in your workflow?

# Pleasant aspects of Jupyter Notebook:



#### What aspects of Jupyter Notebook make it difficult to use in your workflow?



Themes associated with "lack":

- Lack of version control
- Lack of integration
- Lack of collaborative system/multi user support

Themes associated with "hard":

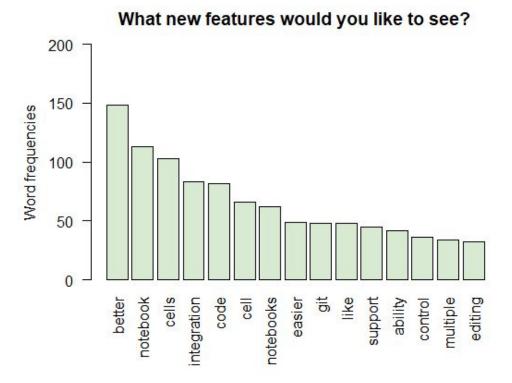
• Hard to use git diff

Themes associated with "difficult":

- Difficult to work with large notebooks
- Difficult to use Notebook with git

Recommendations: Improve integration with git, make it easier to navigate large notebooks

What new features or changes would you like to see in Jupyter Notebook? Please list anything that comes to mind that helps you in your workflow, big or small.



Themes associated with "better":

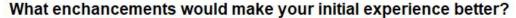
- Want better text editor
- Want better undo
- Want better UI

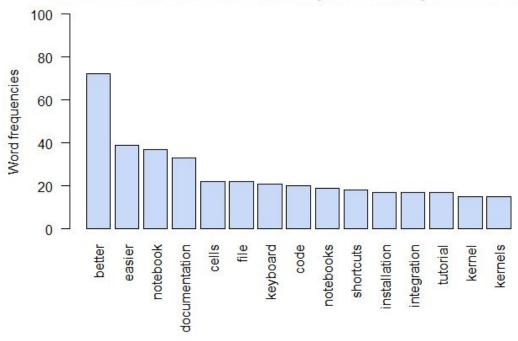
Themes associated with "integration":

- Git integration
- D3 integration

Recommendations: Improve text editor features, git integration, d3 integration

Thinking back to when you first started using Jupyter Notebook, what enhancements would you have made to make your initial experience better?





Themes associated with "documentation":

• Want better documentation (especially intro documentation)

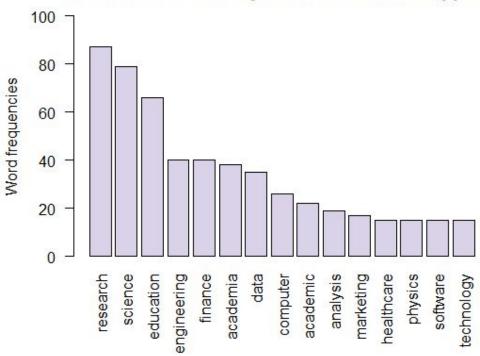
Themes associated with "kernel" and "kernels":

- Add more kernels
- Easier installation of kernels

*Recommendations:* Improve introduction documentation, add kernels, easier to install kernels

What industries does your role and analytical work support? E.g. Journalism, IT, etc.

# What industries does your role and work support?



#### SUMMARY OF RECOMMENDATIONS

- 1. Improve version control
- 2. Improve integration with git
- 3. Improve text editor
- 4. Improve integration with d3, vim, matplotlib, emacs, and spark
- 5. Make it easier to navigate large notebooks
- 6. Improve introduction documentation, add kernels, and make it easier to install kernels