Introduction: Before choosing a dashboard we must know it's strengths and weaknesses. Here a comparision between Plotly **Dash,Panel,Streamlit and Voilá** is being presented.

	Dash	**Panel**	**Streamlit**	**Voila**'
Primary Objective	2 different versions of the Dash framework available on the market today — 'Dash Open Source' and 'Dash Enterprise'.It have the power of plotly.js and React.js	Panel is a fully open source. Jupyter server, or normal web server, It is also possible to export your application as a typical HTML webpage . Panel comes with the power of HoloViz family of tools. Maintained by Anaconda developers.	Full open source "The fastest way to build and share data apps" <ref name="LoC">[https://www.loc.gov/about/ Library of Congress]</ref>	Maintained by Jupyter community of developers. Primary objective is transition from exploratory phase of data analysis to visual representaion on webserver and communication of resulting data insight.
Multipage	yes	Yes	no	no
Language	python,R,Julia	Python	python	python,c++,Julia
Simultaneous Users	Perfect	supports-well	No	dont support good
Big data set	yes	yes	No	No
File type Support	.py and .ipynb	.py and .ipynb	.py	.ipynb
Optimal use cases	Perfect in all case	perfect when working with geo spatial data	when data set is small	when we have to present our python notebook on web
Development — Advantages + Disadvantages	Each Dash app is composed of 2 parts — the application layout, and application callbacks which permit interactivity https://dash.plotly.com/layout Create your own Dash components using JavaScript and React.js	Panel's main strength is its extensive API. There are multiple ways of doing the same thing . Panel applications are built of 3 main components: Widgets, Panes, and Panels . Panel User Guide	quick and easy development flow application will update to reflect these changes in the browser. Streamlit prides itself on its simplicity,	
Deployment — Options, Advantages + Disadvantages	It is possible to deploy your Dash application to AWS, Azure, Google Cloud Platform, and many other cloud providers. Dash offer Dash Deployment Server. ContainDS Dashboard. Can be deployed on Apache Webserver and also on an Nginx webserver.	Panel apps are supported by Jupyter, Bokeh, and Voilà servers, Recommend way is to deploy panel app on bokeh server and then deploy it to production environment. Panel app can be deployed on bokeh server, heroku, google cloud, Microsoft Azure, and DigitalOcean. MyBinder is another option to deploy panel app	https://discuss.streamlit.io/t/streamlit-deployment-guide-wiki/5099 Streamlit sharing is another option to deploy the dasboard.	Binder,Heroku,google app engine.

References:reflist