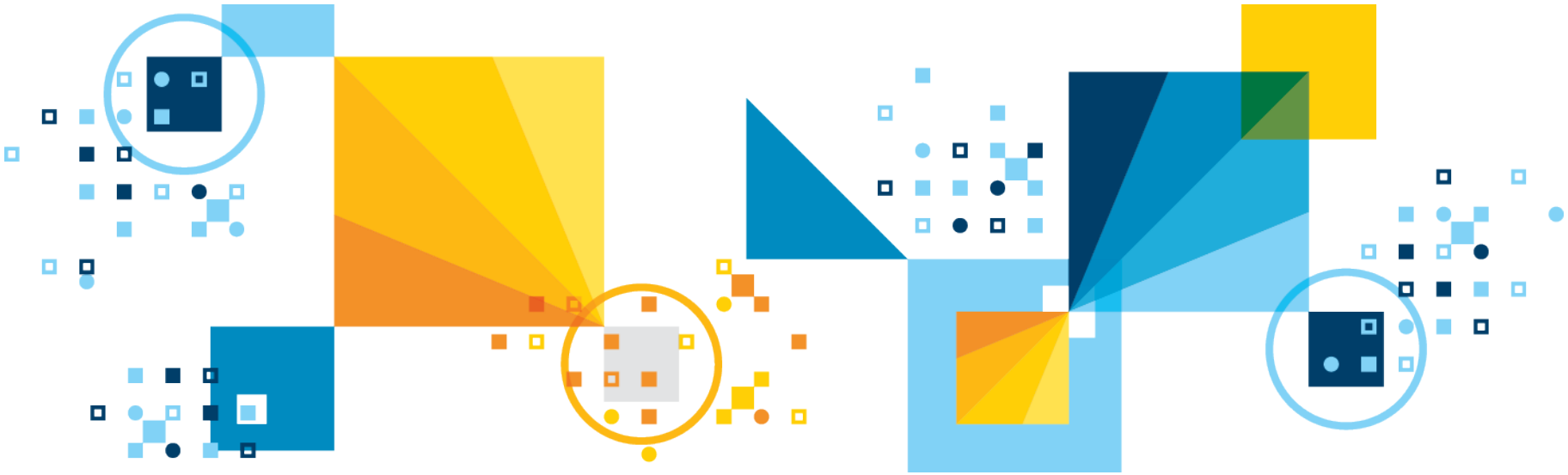
IBM Data Science Experience Overview



Introducing the Data Science Experience

Learn

Built-in learning to get started or go the distance with advanced tutorials

Create

The best of open source and IBM value-add to create state-of-the-art data products

Collaborate

Community and social features that provide meaningful collaboration

External URL: http://datascience.ibm.com
Internal ZACS Page: https://ibm.biz/BdrDv5

Data Scientist Persona - Current Challenges and Pain Points

- **Rigid toolset**
  - Have to choose one and only one approach
  - Cannot easily connect all of the capabilities required
  - Difficult to navigate between the various tools used
- **Fragmented and time consuming**
  - Using multiple disjoint environments
  - Separate on-ramp/community for each tool/environment
  - Does not have meta data or data lineage
- **Analytical Silo**
  - Difficult to maintain and version control project assets
  - Limited means of collaborating with teams
  - Results are difficult to share

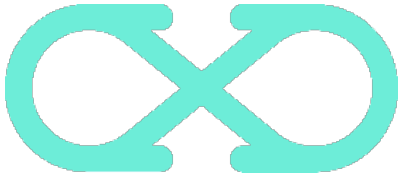
IBM Data Science Experience

Click here to watch video

IBM Data Science Experience

ALL YOUR TOOLS IN ONE PLACE

IBM Data Science Experience is an environment that brings together everything that a Data Scientist needs. It includes the most popular Open Source tools and IBM unique value-add functionalities with community and social features, integrated as a first class citizen to make Data Scientists more successful.



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Core Attributes of the Data Science Experience

IBM Data Science Experience

Community

- Find tutorials and datasets
- Connect with Data Scientists
- Ask questions
- Read articles and papers
- Fork and share projects

Open Source

- Code in Scala/Python/R/SQL
- Jupyter Notebooks
- RStudio IDE and Shiny
- Apache Spark
- Your favorite libraries

IBM Added Value

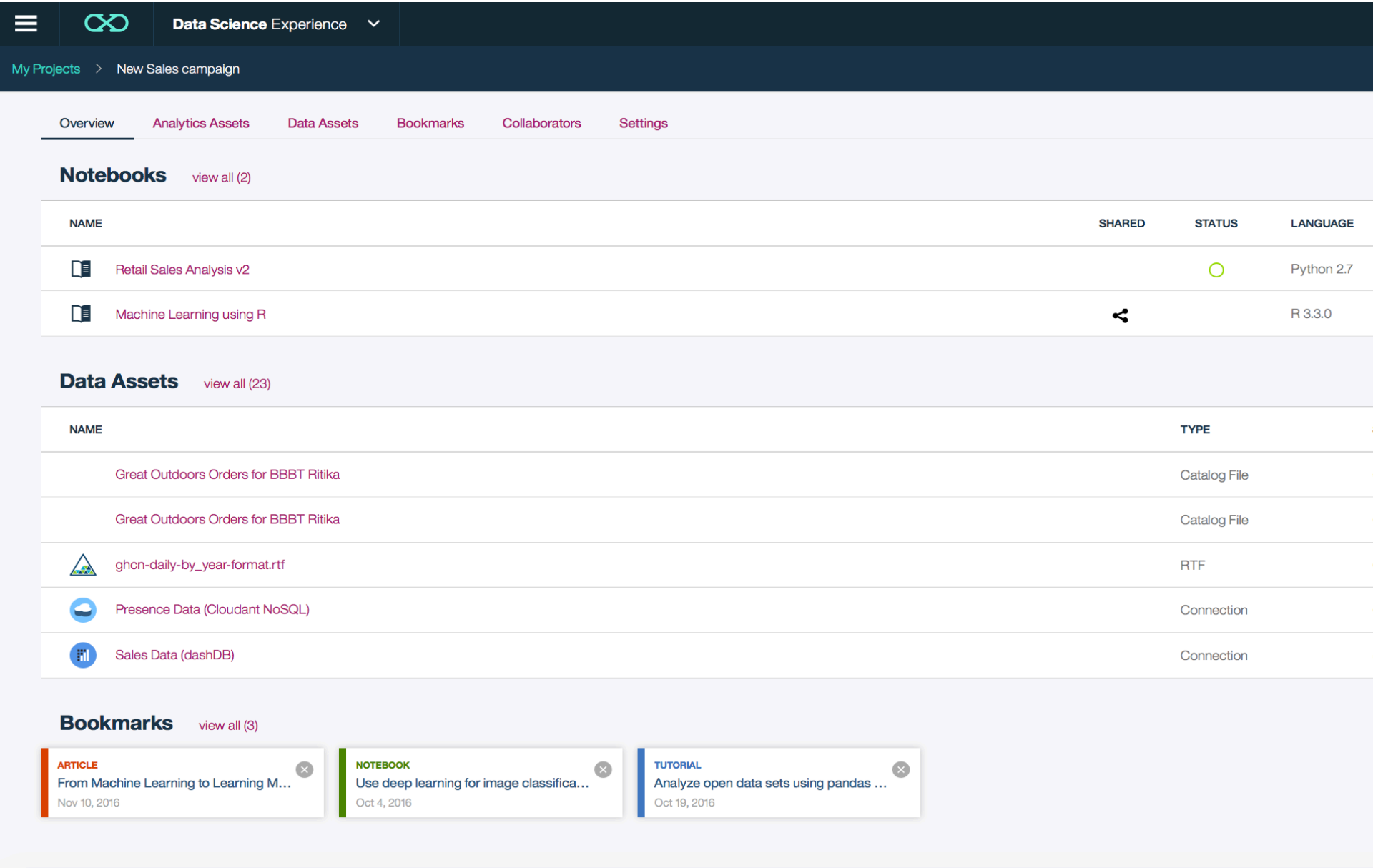
- Flows*
- Watson Machine Learning**
- Prescriptive Analytics – DOcplexcloud**
- Projects and Version Control
- Managed Spark Service

Powered by IBM **Watson Data Platform**

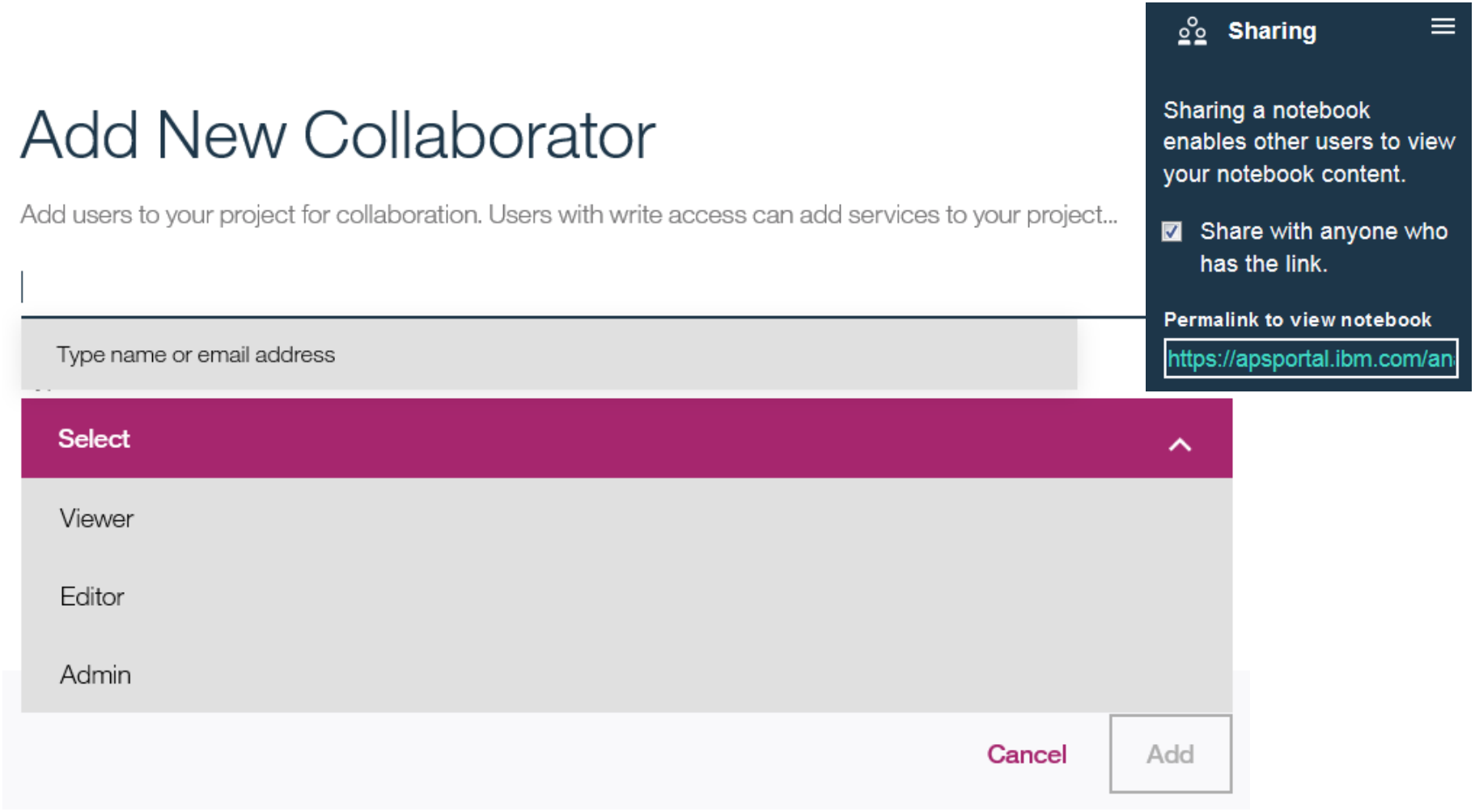
* Closed beta

** Integrated with DSX, but separate part numbers need to be purchased to use this capability

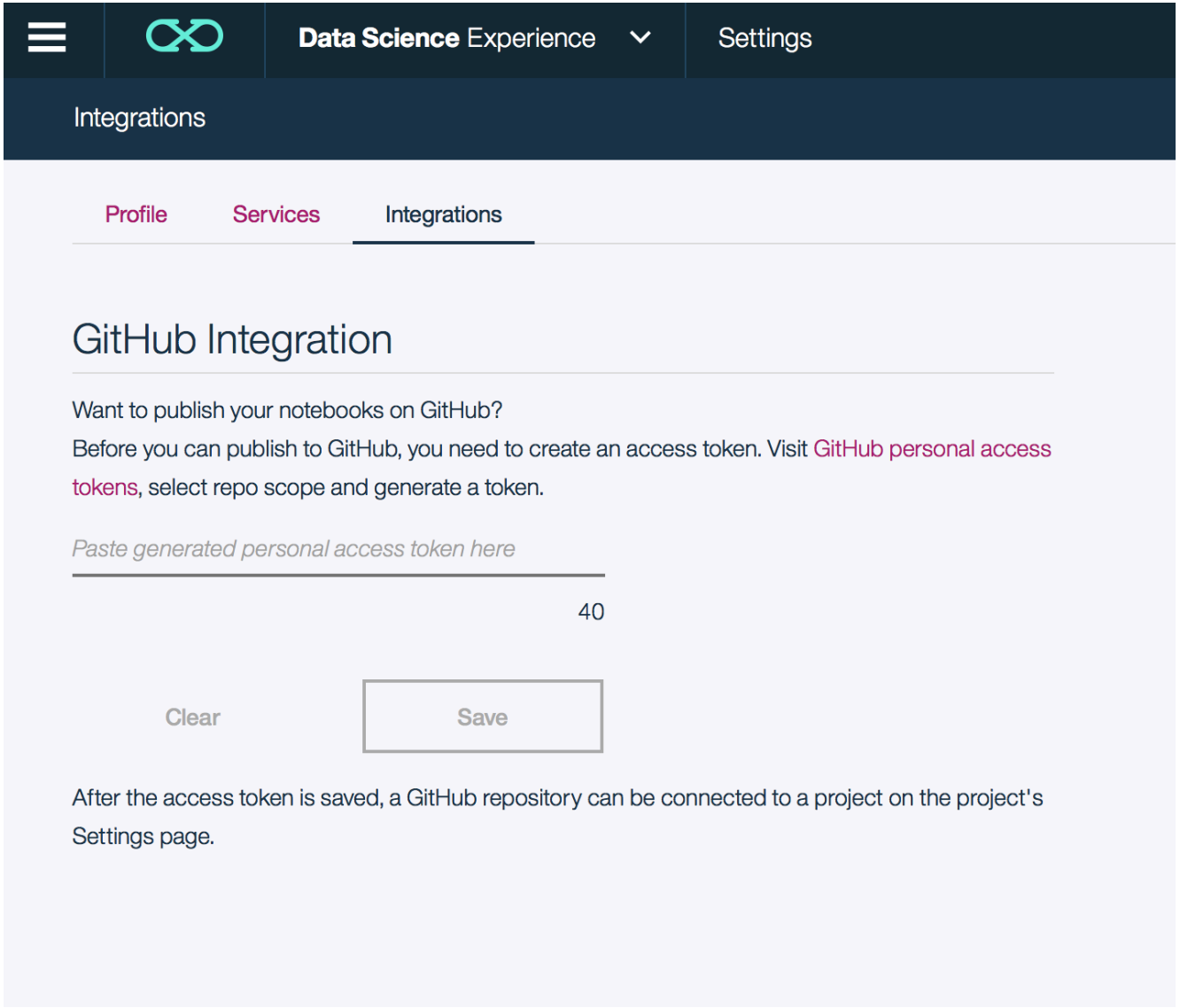
Collaborate Using Projects



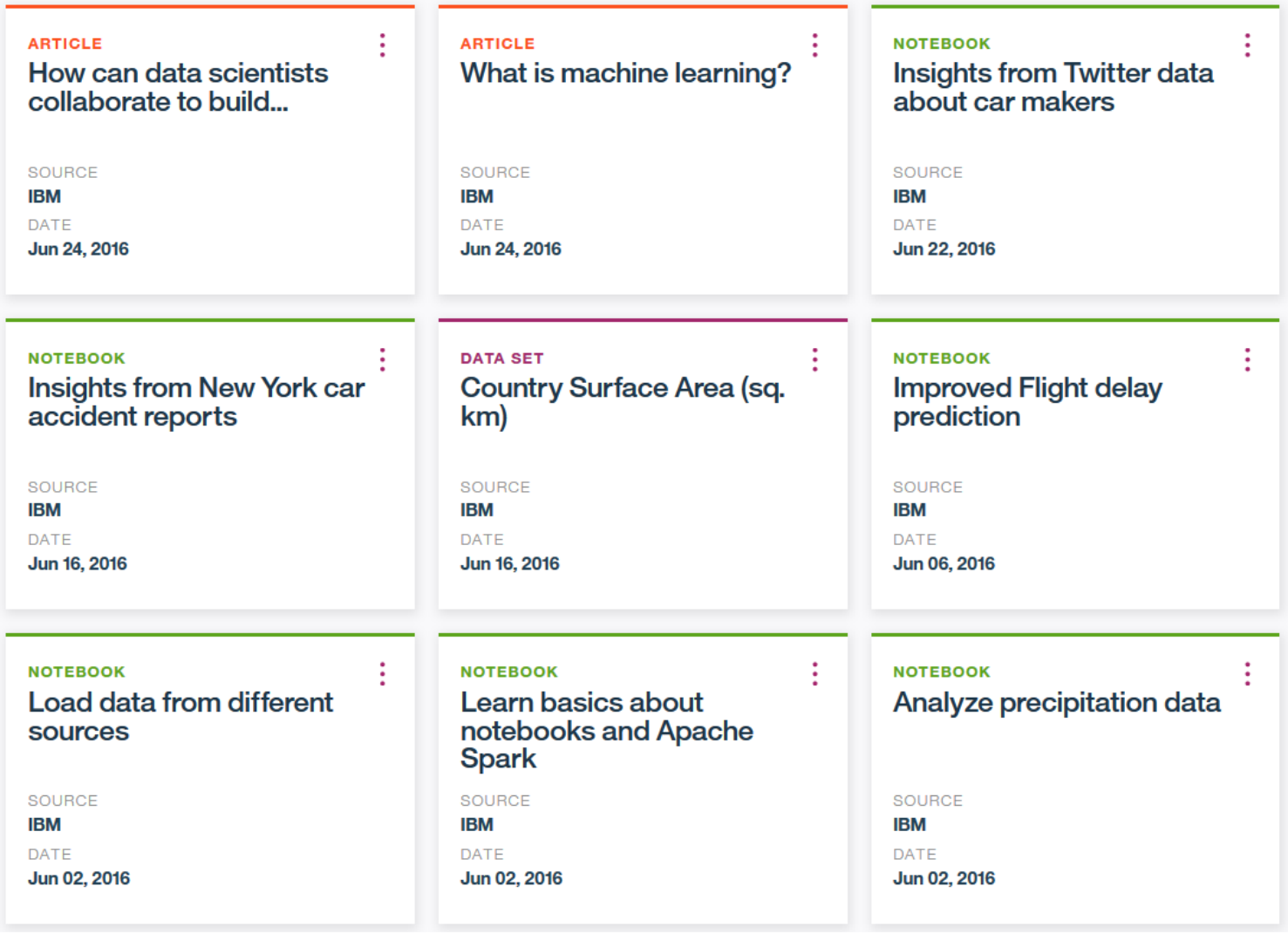
Features for sharing, forking, and reusing Project assets to increase your data science team's productivity



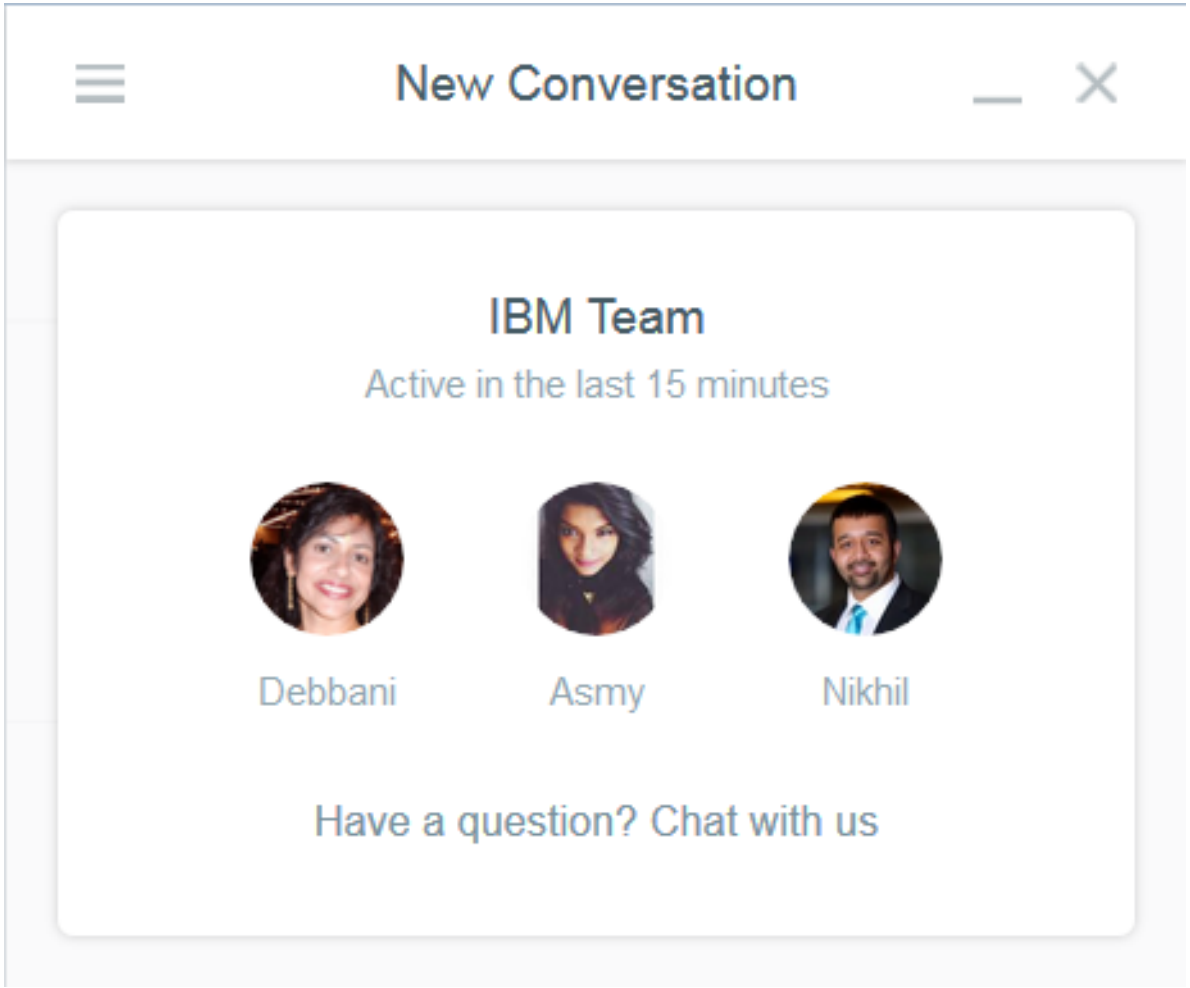
GitHub Integration



Community Cards provide in-context learning for users



Live chat on Intercom for support from the IBM team and to provide your feedback on how we can improve DSX



Integrated Jupyter Notebooks for interactive and collaborative development - seamless execution on Spark

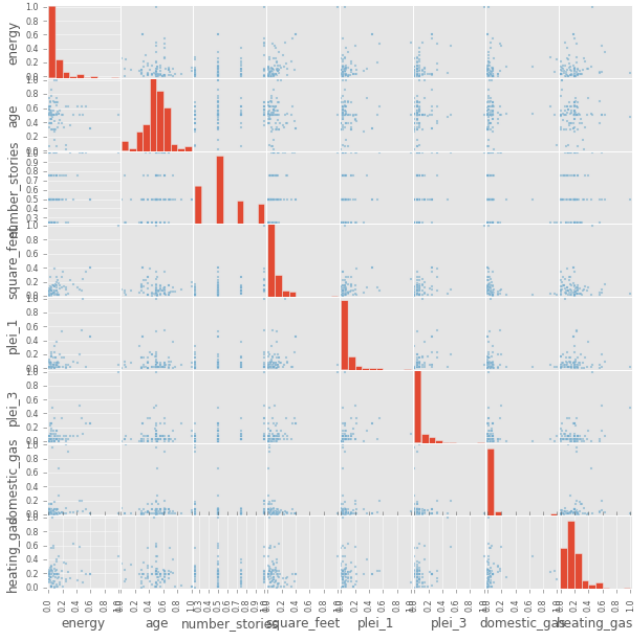
Notebooks > Spark Summit West - BlocPower Demo

File Edit View Insert Cell Kernel Help | Python 2

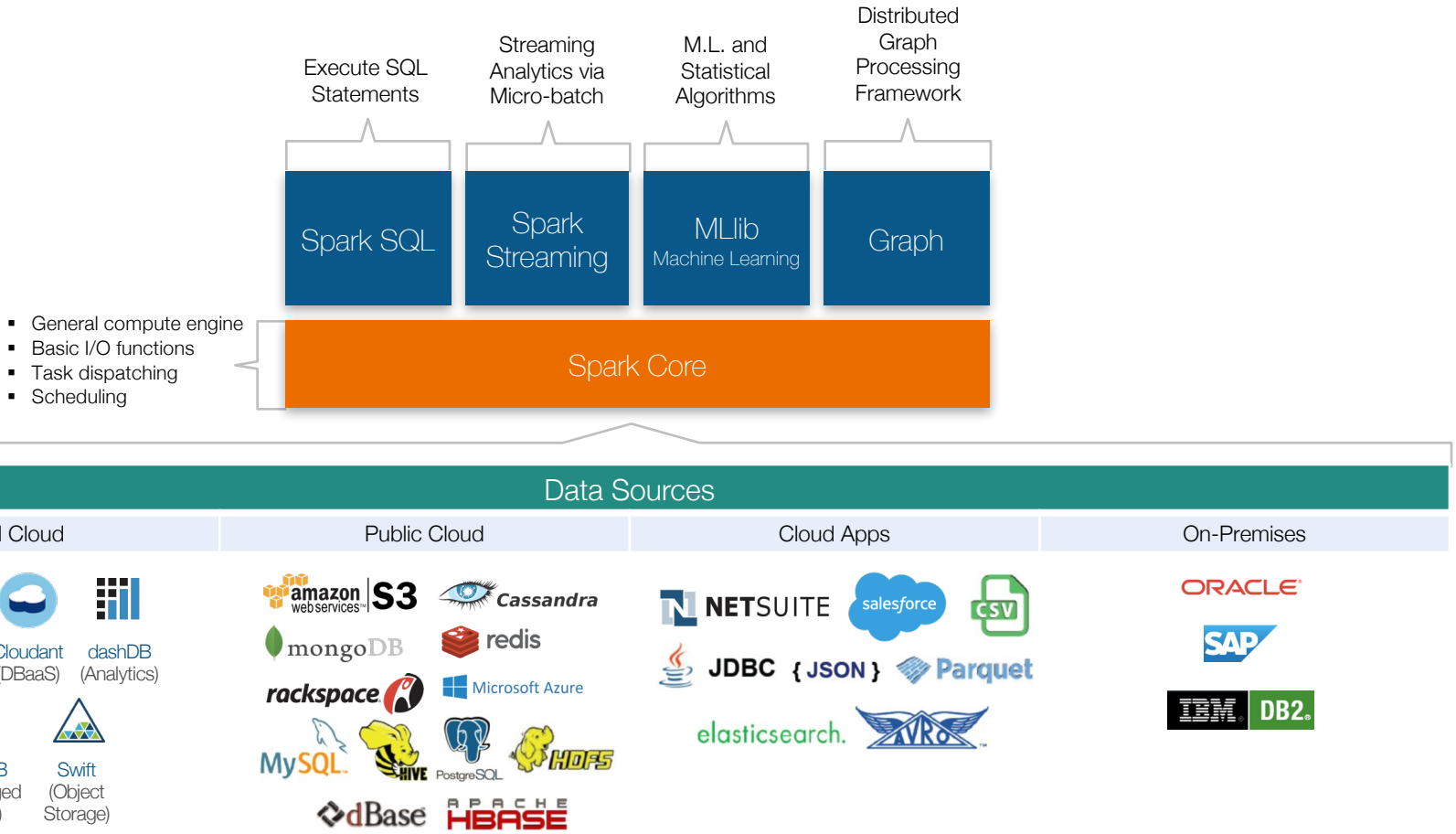
Format Markdown Cell Toolbar None

Explore the correlations

```
In [9]: import matplotlib.pyplot as plt
        %matplotlib inline
        plt.style.use('ggplot')
        ff = pd.tools.plotting.scatter_matrix(dfScaled, diagonal='hist',figsize=(10,10))
```



From a Notebook you can use IBM's managed Spark Service to blend multiple data types, sources, and workloads

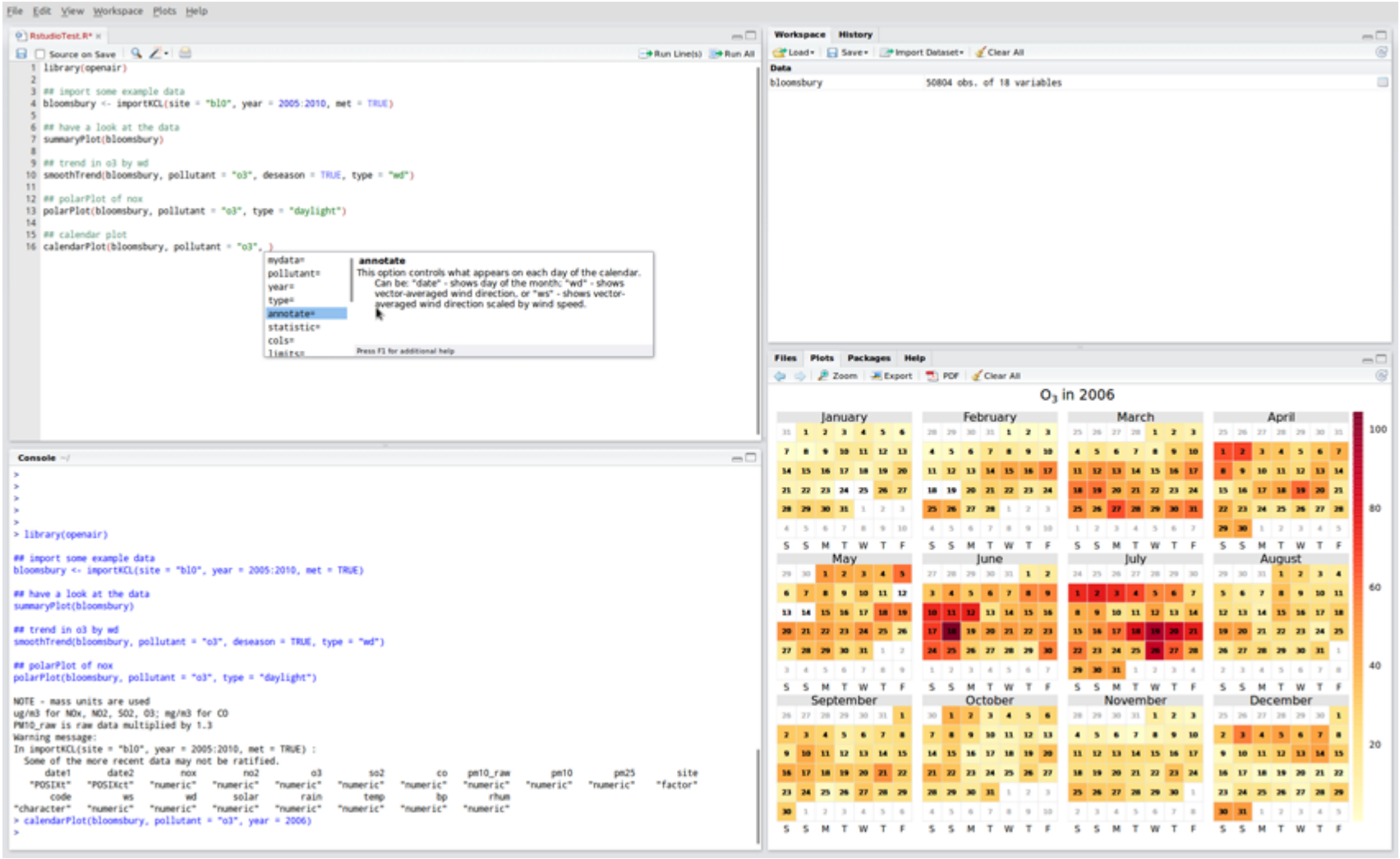


Supported Data Sources for DSX via on-premises and cloud Connections

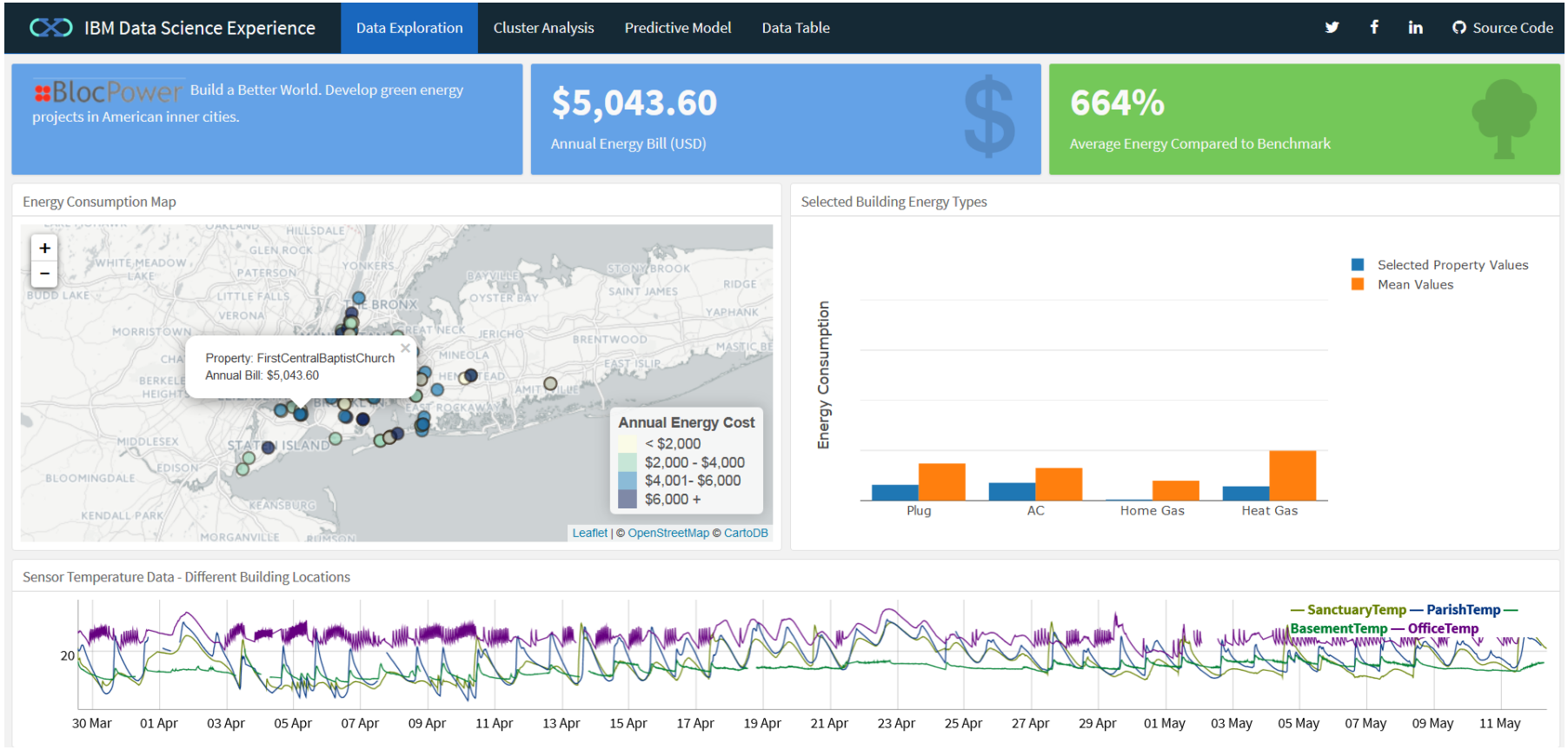
Cloud Sources	On-Premises Sources	Cloud Targets	On-Premises Targets
Amazon Redshift	Apache Hive	Amazon S3	IBM DB2® LUW
Amazon S3	Cloudera Impala	Bluemix Object Storage	IBM Pure Data for Analytics®
Apache Hive	IBM DB2® LUW	IBM Cloudant™	Teradata
Bluemix Object Storage	IBM Informix®	IBM dashDB	
IBM BigInsights™ on Cloud	IBM Pure Data for Analytics®	IBM BigInsights™ on Cloud	
IBM Cloudant™	Microsoft SQL Server	IBM DB2® on Cloud	
IBM dashDB	MySQL Enterprise Edition	IBM SQL Database	
IBM DB2® on Cloud	Oracle	IBM Watson™ Analytics	
IBM SQL Database	Pivotal Greenplum	PostgreSQL on Compose	
Microsoft Azure	PostgreSQL	SoftLayer Object Storage	
PostgreSQL on Compose	Sybase		
Salesforce	Sybase IQ		
SoftLayer Object Storage	Teradata		

All of the supported targets are compatible with each source

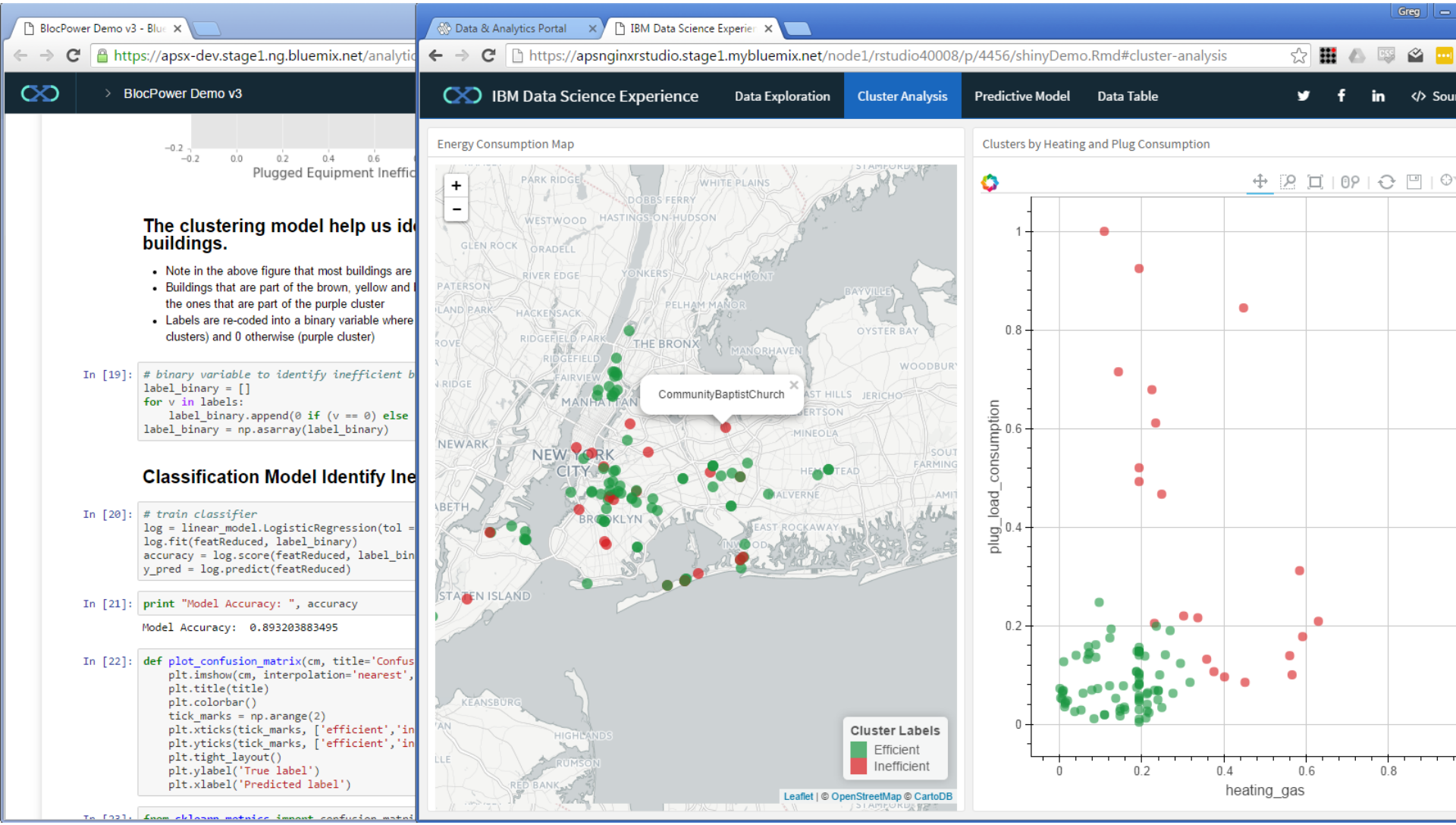
DSX has RStudio built into the experience thanks to our strategic partnership



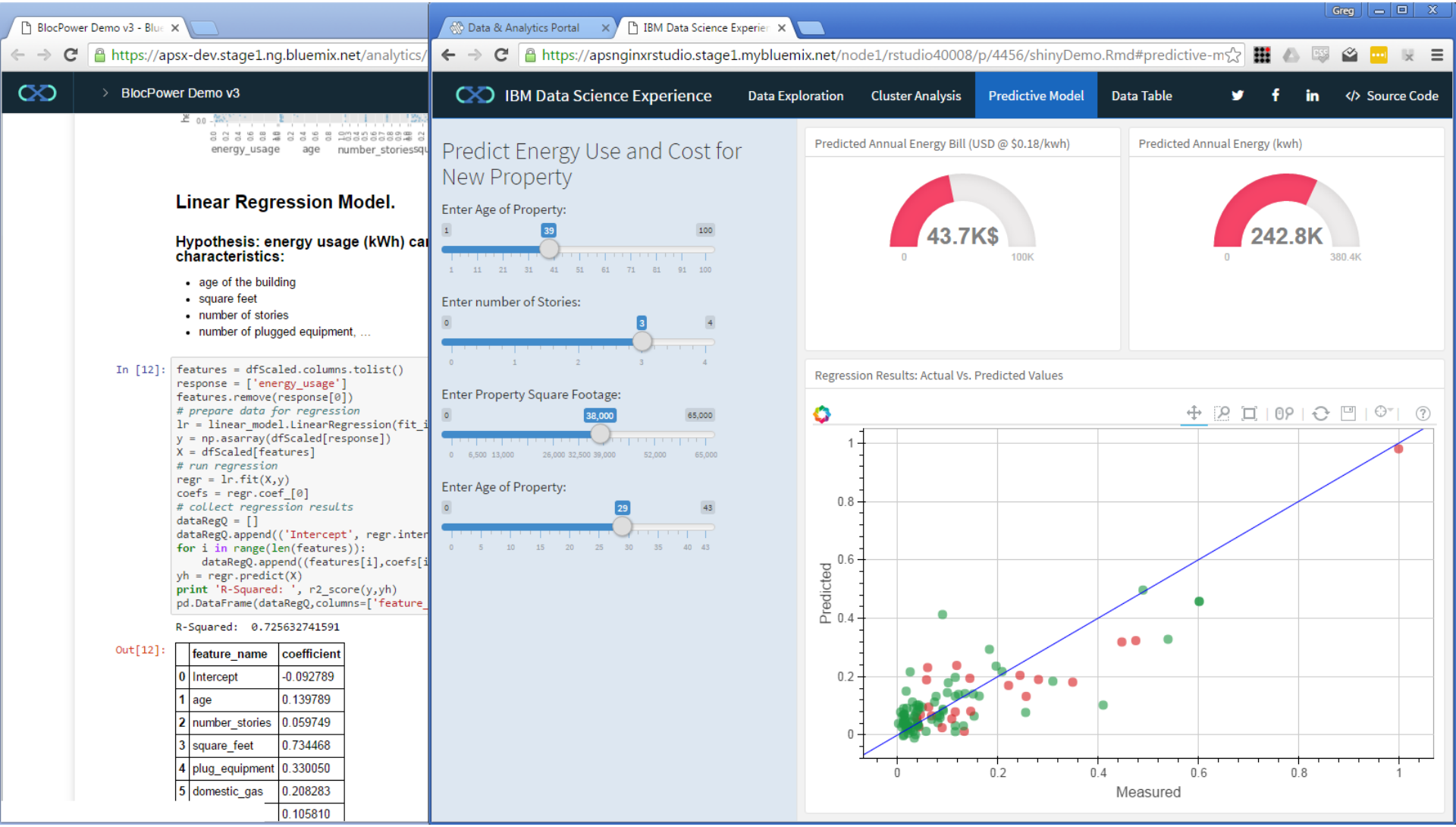
With RStudio you can create Shiny web applications to make your analysis accessible to the business

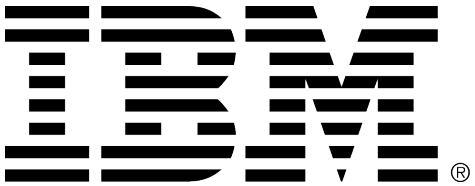


Interactively explore the analysis of your data science team



Adjust parameters on-the-fly and visualize model predictions





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