Unit 3: Core tools

Dashboards & Bokeh

Lesson 32

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Overview of unit

Objectives:

- Understanding how data science activities necessitate certain kinds of tools
- Fundamentals with core data science tools

1. Why core tools?
2. Project organization
3. Python
4. Best practice: write CLI tools
5. Best practice: write unit tests
6. Best practice: resource referencing
7. Github
8. Jupyter notebooks
9. Jupyter & statefulness
10. Bokeh
11. Advanced bokeh
12. HW 3

Lesson overview

Objectives

- Understand why dashboards are fundamental data science tools
- Understand the fundamentals of building a dashboard

Outline

- The problem
- What is a dashboard?
- Introducing bokeh

The problem

Our client needs to be able to explore different trends across MANY variables in your results:

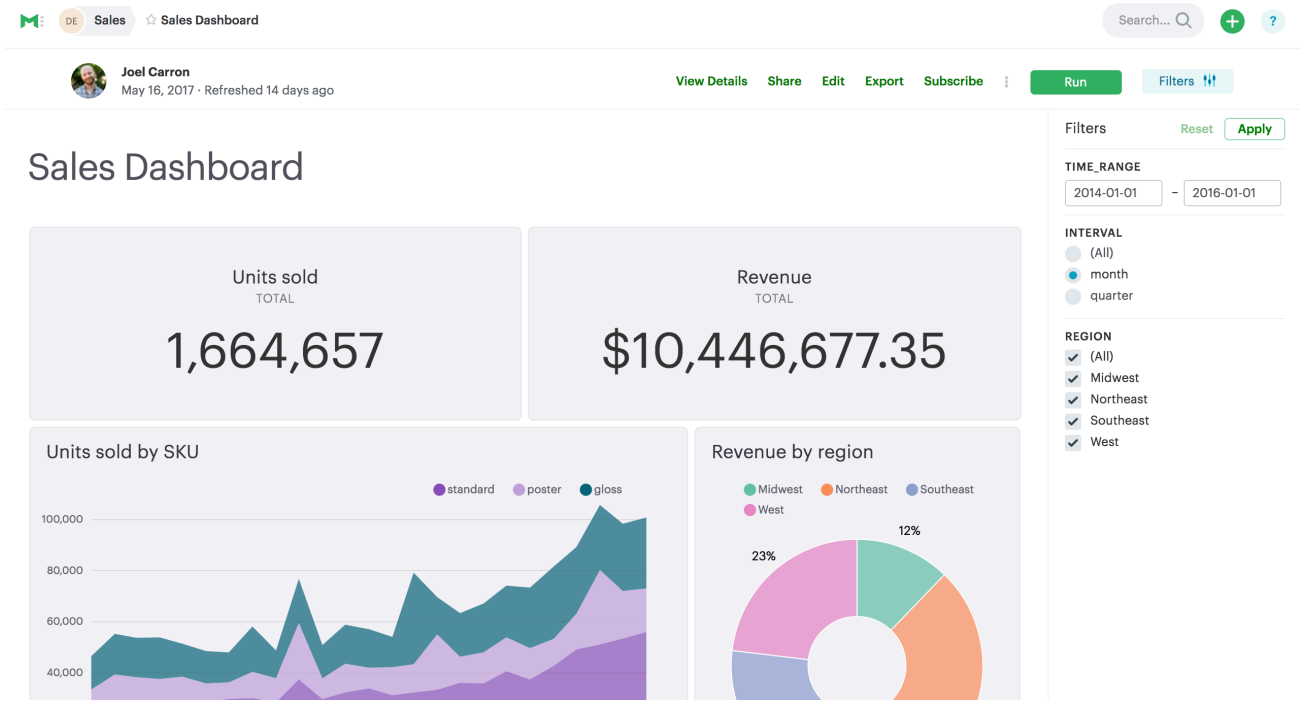
- How is the electorate responding to a campaign message in each US state?
- What is the level of conflict in each country in the world?

Our client wants an up-to-date view of the latest analysis at all times

- How are supply levels in clinics across Montreal?
- Which zipcodes are reporting flooding?
- Which sales units have gotten unfavorable customer feedback?

What is a dashboard?

A GUI panel that allows the user to view a set of visualizations and, in real-time, configure a small set of options for those visualizations.



We write python appcode, bokeh creates a whole website for it

bokeh serve cereal_app

VS code port forwarding in remote tools

get the data in a form I at you want to render

Introducing bokeh

pip install pandas in EC2

Lesson wrap-up

Takeaways

- Dashboards can be a necessary part of completing a data science project
- Bokeh is a powerful, open-source dashboarding solution

Up next

- Advanced bokeh