

# Data Analytics for Managers

Instructors: Richard Dunks and Julia Marden

Follow along at: <http://bit.ly/data-driven-gov>

See the code at: <http://bit.ly/data-driven-gov-code>

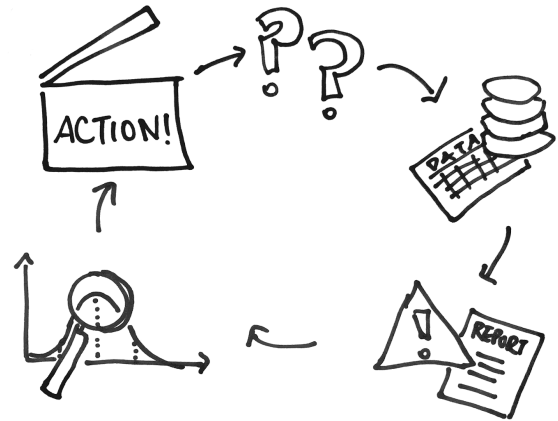
## Key Questions for the Morning

- What is the value of data?
- What is analysis?
- What does it mean to be data-driven?

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## The Analytics Value Chain

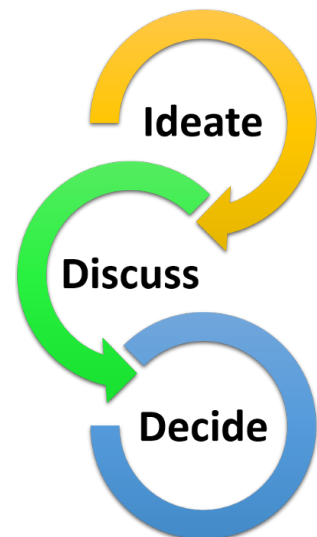
- What are the key steps?



- What are the key things to keep in mind?

## Problem Scoping

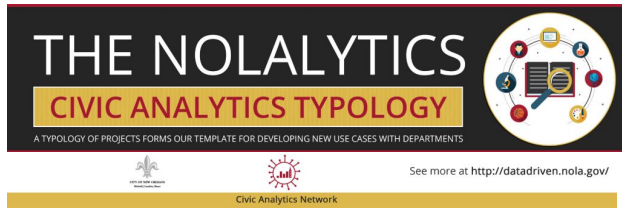
- **Ideate:** On your own, generate at least 3 ideas (ideally more), each on their own Post-It Note
- **Discuss:** Review the ideas generated
- **Decide:** Come to a consensus as a group



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## Process Mapping Steps

- Identify the key problem/question
- Identify the desired outcome
- Identify key outcome measures (**How do we know we've got it right?**)
- Identify the key inputs (data)
- Identify the key steps to use inputs to achieve the outcome



Based on the work of the [City of New Orleans, Office of Performance and Accountability](#)

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Finding the needle in a haystack



Prioritizing work for impact



Early warning tools



Better, quicker decisions



Optimizing resource allocation



Experimenting for what works

## 4 Concerns to Be Mindful Of

1. Technical

2. Legal

3. Cultural

4. Political

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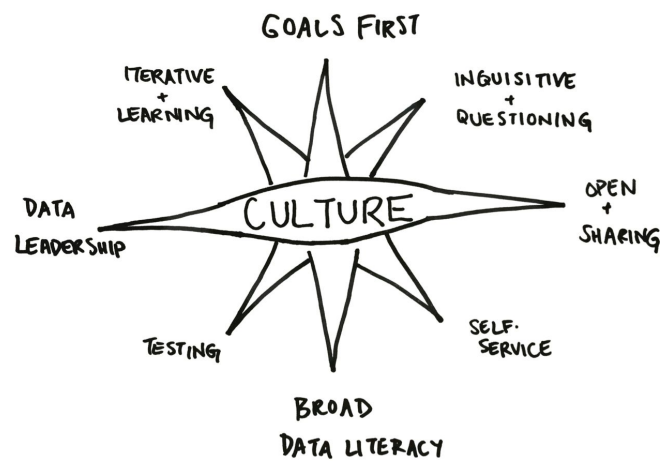
## Key Benefits of Good Analysis

## Key Questions for the Afternoon

- What is open data?
- What are the benefits of open data?
- What are some of the concerns with open data?

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- What is exploratory data analysis? Why is it important?

- What is a data-driven culture?



- How do we create it in government?

# Data Exercise

Filter

Filter this dataset based on contents.

Created Date ▾ is between ▾

☒ 01/01/2016 12:00:00 AM and 04/01/2016 12:00:00 AM

☐ and

Complaint Type ▾ contains ▾

☒ noise

☐

Download

Download a copy of this dataset in a static format

Download As

CSV

CSV for Excel

JSON

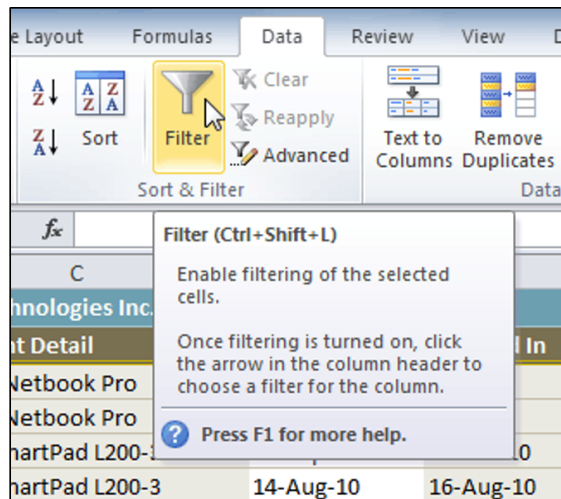
RDF

RSS

TSV for Excel

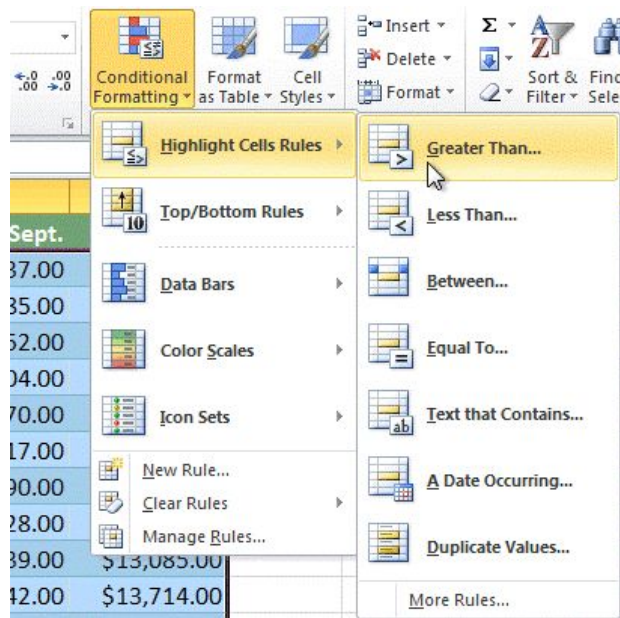
XML

## Filtering

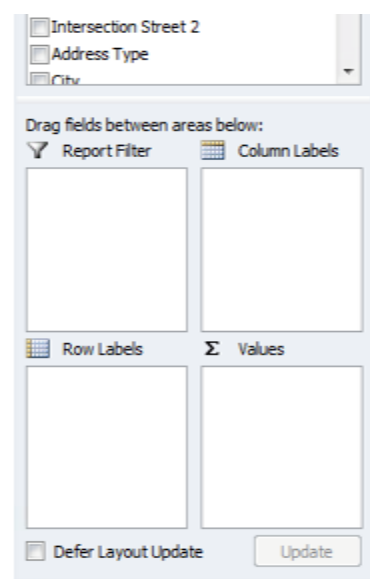
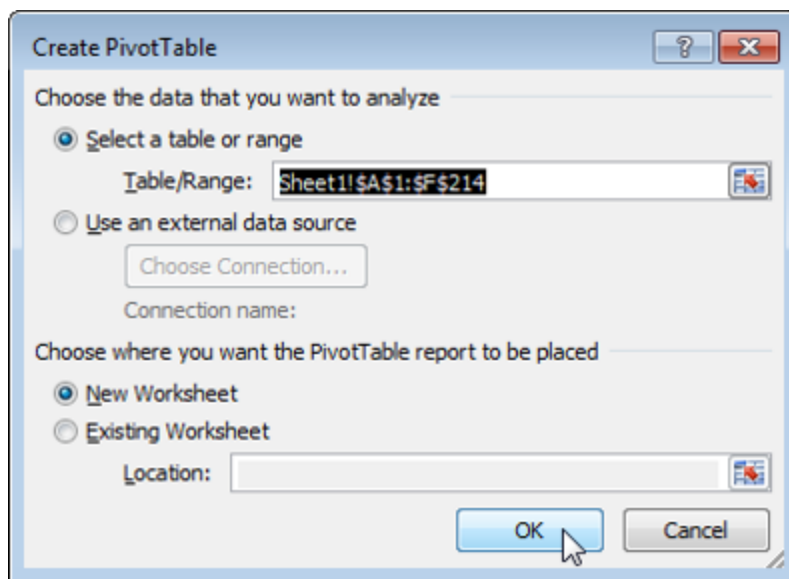
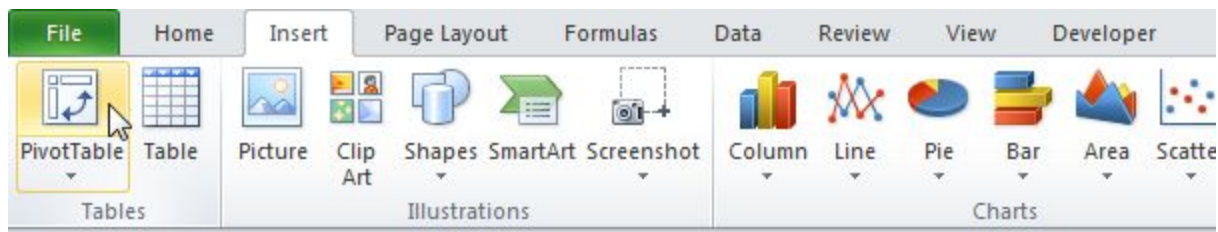


	A	B	C	D	E	F
1	Unique Key	Created Date	Closed Date	Agency	Agency Name	Complaint Type

# Conditional Formatting



# PivotTables





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## Useful Functions in Excel

**=SUM():** Calculates the sum for a range of numbers

**=COUNT():** Counts the number of cells containing numbers in a range

**=COUNTA():** Counts the number of non-blank cells in a range

**=HOUR():** Extracts the hour from a timestamp

**=WEEKDAY():** Extracts the day of the week from a timestamp

**=CHOOSE():** Uses an index number to return a result from an ordered list of values

### Contact Information

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### Resources

- Data Driven New Orleans <https://datadriven.nola.gov>
- Harvard Government Performance Lab  
<https://govlab.hks.harvard.edu>
- Carl Anderson **Creating a Data-Driven Organization**
- DJ Patil & Hilary Mason **Data Driven: Creating a Data Culture**  
<https://www.oreilly.com/ideas/data-driven>
- Datapolitan training classes <http://training.datapolitan.com/>

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## Your Notes