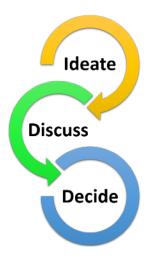
Introduction to Data Analytics for NYC Parks

Follow along at: http://bit.ly/parks-intro-analytics

Key Questions from the Morning

- The Value of Data

- What is Analysis?



Our Method for Generating Ideas (Brainstorming)

Ideate - Generate at least 3 ideas (ideally more), each on their own Post-It Notes

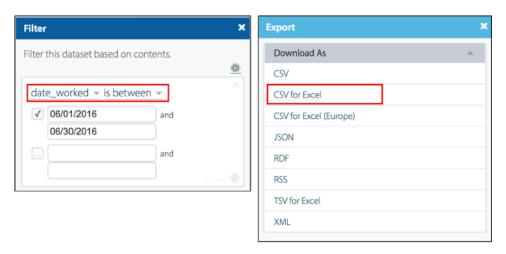
Discuss - Review the ideas generated

Decide - Come to a consensus as a group

Process Mapping Steps

- Identify the key challenge
- Identify the outcome
- Identify the outcome measures (outputs)
- Identify the key inputs (data)
- Brainstorm key steps to get inputs to the output

Filter for Daily Tasks FY2016 data from NYC Open Data Portal



Key Excel Functions

- **=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
- **=MID()**: Select a specified number of characters from a text string
- **=LEFT()**: Select a specified number of characters from the beginning of a text string
- **=RIGHT()**: Select a specified number of characters from the end of a text string
- **=FIND()**: Find the location of a given character in a text string
- **=CONCATENATE()**: Combine characters together into a text string
- **=VLOOKUP()**: An operation to look up a value in another location based on an index value
- **=IF()**: A function for logical comparison between values to return a desired result given a particular condition

Civic Analytics Typology



Based on the work of City of New Orleans, Office of Performance and Accountability Graphics: Copyright [©] Harvard University Ash Center (Used with Permission)

Analytics Value Chain



image by Julia Marden julia@tinypanther.com

Resources

- Microsoft Office Support (http://office.microsoft.com/en-us/support/) Documentation on various MS Office products
- **Design Kit** (http://www.designkit.org/) Resource for design thinking techniques like the ones we covered today
- Excel Tips (http://excel.tips.net/) Various tips and tricks for using Excel
- Data Science Cheatsheet (https://github.com/govex/Data-Science) Includes various terms and concepts related to data science
- Datapolitan Training Classes (http://training.datapolitan.com)

Contact Information

Email: training@datapolitan.com Website: http://www.datapolitan.com Twitter: @datapolitan

Your Notes

Implementation Guide

Concept/Technique	Why It's Important	How I Can Use It
The Value of Data		
What is Analysis?		
Problem Ideation		
Process Mapping		
PivotTables		
Types of Analysis		
Data Driven Culture		