Introduction to Data Analytics for NYC Parks

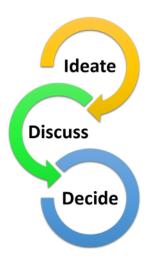
Follow along at: http://bit.ly/data-analytics-parks

Password: data4parks

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

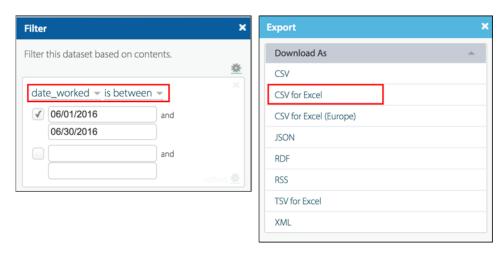
Discuss - Review the ideas generated

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

A

Finding the needle in a haystack



Prioritizing work for impact



Early warning tools



Better, quicker decisions



Optimizing resource allocation



Experimenting for what works

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Analytics Value Chain



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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)

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Your Notes