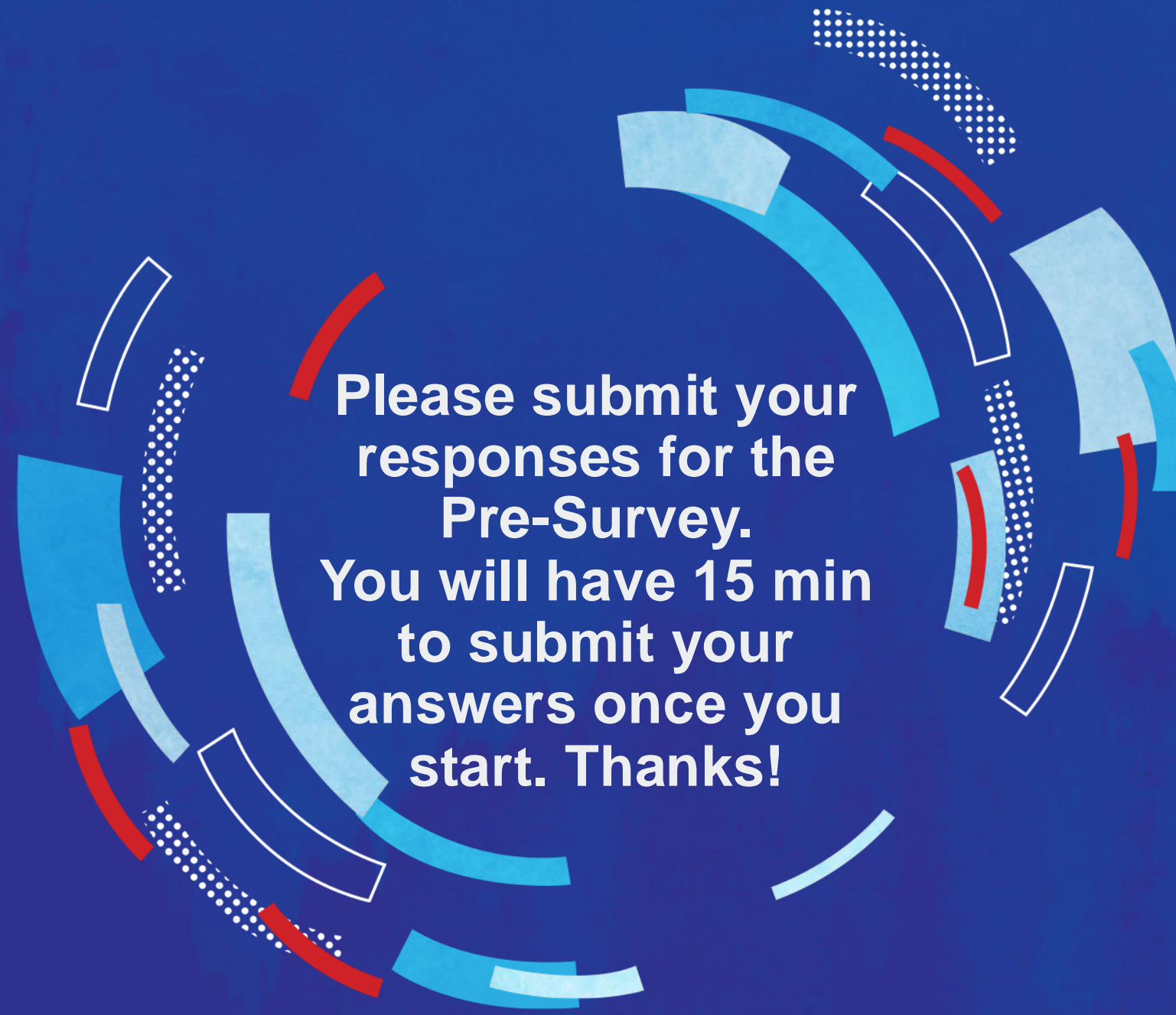




We're starting soon



**Please submit your
responses for the
Pre-Survey.
You will have 15 min
to submit your
answers once you
start. Thanks!**

MSA 8030 – Communicating with Data

Mark Jack mark.a.jack@gmail.com

October 22, 2024

Week 1 – Course Concept, Syllabus, Team Presentations and Peer-To-Group Evaluations, Learning Tools Used Lecture: Exploratory Data Analysis

Mark Jack mark.a.jack@gmail.com

October 22, 2024

Course Resources

Recommended textbook:

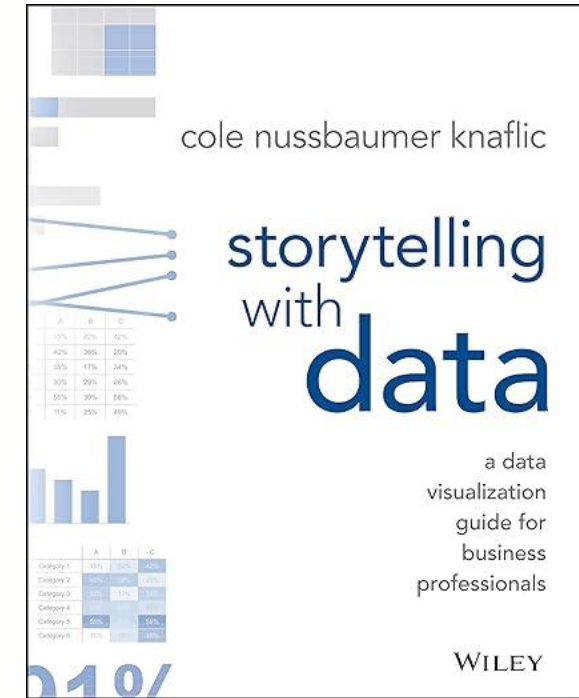
story telling with data - a data visualization guide for business professionals, 1st edition

by Cole Nussbaumer Knaflic ([Wiley](https://www.wiley.com/author/cole-nussbaumer-knaflic))

Github site:

CommunicatingWithData

<https://github.com/mjgrav2001/CommunicatingWithData>



General Discussion (90 min)

Discuss with class:

- **Attendance recording – online pre-survey in iCollege, sign roll sheet!**
- Important course requirement: **Market-Ready-To-Do List** completion by every student by Nov 22!
- Office hours, hybrid teaching (in-person/online), attendance, general logistics
- Course concept MSA 8030 ‘Communicating With Data’
- Course structure (7-week schedule)
- Weekly team presentations
- Weekly student-to-team (peer-to-group) evaluations
- General grading with deliverables
- Course content in iCollege with learning tool ‘**FeedbackFruits**’ for group evaluations, **Tableau / Power BI** for visualizations, etc.



Break
back at 1:30 p.m.

Group Activity (30 min): Team formation and data set selection

Tasks:

- **Form a team** of minimally 3 or maximally 4 students!
- **Select a dataset:**
 - Go to Github site: <https://github.com/mjgrav2001/CommunicatingWithData>
 - Go to folder ***datasets*** and select a sub-folder with for a dataset
(descriptions and links to download each data set are included in .txt files)
- Let me (the instructor) know who your team members are and what data set you selected!



Break
back at 2:00 p.m.

Lecture (30 min): Exploratory Data Analysis

Jupyter Notebook in Github repo:

<https://github.com/mjgrav2001/CommunicatingWithData>

[ExploratoryDataAnalysis.ipynb](#)



Class ends at 2:30 p.m.

Course Schedule

#	Topic and Objectives
1	Intro & Getting Started <ul style="list-style-type: none"> • Course Overview (relevance, examples, etc.) • Market-Ready-to-do List (MRTDL) by Career Advancement Center • Pick a dataset (Datasets will be provided by instructor on first day of class. If you already have formed a team of 4 students to collaborate and work together and want to use your own dataset, this needs to be vetted and approved by the instructor. Examples: something you are working on from another project, Walmart data on Kaggle, synthetic data from Synthea, etc.) • Explanation of peer-to-peer evaluation of presentations every week • Instruction: Exploratory data analysis • Assignment: Prepare 1-minute “describe your dataset” presentation
2	<p>Start with Presentations: (present what was assigned in the previous class)</p> Understand the Business (and core business processes) <ul style="list-style-type: none"> • Activity (for a specific case or example business): Describe the business for an example business (inputs, activities, outputs/metrics), develop a simple flowchart, identify opportunities • Instruction: Understanding the business problem, extracting the use case(s) • Assignment (for your selected business): Prepare 3-minute presentation that describes the business, core business process(es), and opportunities for your selected business
3	<p>Start with Presentations: (present what was assigned in the previous class)</p> Identify a Business Problem (and why it needs to be addressed) <ul style="list-style-type: none"> • Activity (for a specific case or example business problem): Developing persuasive arguments; Create tension with a visualization (draft) • Instruction: Story telling with data - visualizations • Assignment (for your selected business problem): Create a 3-minute “tension” presentation; only 1 visual

Course Schedule

4	<p>Start with Presentations: (present what was assigned in the previous class)</p> <p>Develop a Solution Pitch (for solving the identified business problem)</p> <ul style="list-style-type: none"> • Activity (for an example business problem): Big idea, exec summary, peer review • Instruction: Feasibility study, selection of final use case (big idea) • Assignment (for your selected business problem): Create a 1-minute pitch (includes business overview, tension, and solution)
5	<p>Start with Presentations: (present what was assigned in the previous class)</p> <p>Provide a Progress Update (for an ongoing project)</p> <ul style="list-style-type: none"> • Activity (for your selected solution): Strong visualizations, exploration, status, revisions, issues, lessons learned • Instruction: Data exploration and feedback loops with business stakeholders • Assignment (for your selected solution): Prepare a 5-minute presentation; 5 slides (excluding title slide); 3 visualizations
6	<p>Start with Presentations: (present what was assigned in the previous class)</p> <p>Planning a Final Presentation and Final Report (for a completed project)</p> <ul style="list-style-type: none"> • Activity (for your project): 1st draft of headlines only and main messages per slide; Python Notebook for technical audience and Word document for leadership: clear connections to final presentation, i.e., same structure/order, etc., including a narrative in the final report • Instruction: Technical writing skills • Assignment (for your project): Complete final presentation and reports; 7-minute presentation; 5-7 slides (excluding title slide); appendix if required
7	<p>Final Presentations (and final reports, notebook and Word document) are due</p>