

MGMT 3125 – Introduction to Data Visualization

John Sokol, MS

Week 9 – 3/20/2019

Chapter 7: Lessons in storytelling

Final project overview



Agenda

- GNM 2256 – Designing Graphs & Seeing Numbers
- Quiz 5 and Assignment 5 review
- Chapter 7: Lessons in storytelling
- Final project overview
- Week 9 items due Friday, 3/29



Add/drop period ends Thursday, April 4th

- Per syllabus, grades usually conform to 90 - 100 A range, 80 - 90 B range, 70 - 80 C range, and so forth
- All grades, including mid-term, are included in weighted average calculation on Blackboard
- If there is a concern, please see me after class



GNM 2256 – Designing graphs and seeing numbers

- Teaching a G course next semester Fall 2019
- Tableau and R; very similar course structure to MGMT 3125
- Wednesdays 6:00pm – 7:50pm
- Tell your friends!



Second half of course overview

8	3/13	Spring break	
9	3/20	<ul style="list-style-type: none">Tableau text tables, Chapter 7 - Lessons in storytelling, Communicating data stories	<ul style="list-style-type: none">Quiz 6, discussion board 6 due 3/29
10	3/27	<ul style="list-style-type: none">Chapter 8 - Pulling it all togetherIntroduction to RStudio	<ul style="list-style-type: none">Quiz 7, discussion board 7, due 4/5
11	4/3	<ul style="list-style-type: none">Chapter 9 - Case studiesChapter 10 – Final thoughtsggplot line, bar graphs, Tidyverse	<ul style="list-style-type: none">Assignment 6, Quiz 8, discussion board 8 due 4/12
12	4/7	<ul style="list-style-type: none">ggplot line, bar graphs, Tidyverse** Deadline to withdraw 4/4 **	<ul style="list-style-type: none">Assignment 7 due 4/19Final project due 5/1 @ 11:59pm
13	4/14	<ul style="list-style-type: none">Upload dashboard to Tableau PublicWork on final project	<ul style="list-style-type: none">Final project due 5/1
14	4/21	<ul style="list-style-type: none">Project Presentations on 4/24Work on final project	<ul style="list-style-type: none">Final project due 5/1
15	4/28	<ul style="list-style-type: none">Project Presentations on 5/1Work on final project	<ul style="list-style-type: none">Final project due 5/1

Quiz 5 review



Assignment 5 review

Creating two Tableau dashboards:

LBI dataset

- Property value by home state line graph
- Geospatial map of LBI addresses

Walmart dataset

- Arbitrary visualizations and filters




Tableau text tables

- Our textbook mentions text tables are NOT visualizations, and are to be avoided.
- However, many people are accustomed to Excel spreadsheets; many of these people want to see the raw data in a dashboard.
- Text tables add credibility and provide context for your visualizations.



Six lessons

- Understand the context
- Choose an appropriate visual display
- Eliminate clutter
- Focus attention where you want it
- Think like a designer
- **Tell a story** 



Chapter 7: Lessons in storytelling

- When you see a great play, movie, or read a captivating book, you have experienced the power of storytelling
- Emotional response is the common denominator for great entertainment experiences
- Three parts: **setup, conflict, and resolution**



Setup

- Introduces the setting, main characters, and the character's relationships
- LBI dashboard setup example:
 - Effective marketing and advertisement is the backbone of a great real estate business. For RE/MAX of Long Beach Island, in order for people to buy homes, they must know about the opportunities available and the benefits of owning property at the Jersey Shore.



Conflict

- Defines clearly the main character's problem
- Notably, **conflict** and **tension** are an integral part of story
- LBI dashboard conflict example:
 - However, the advent of website and social media marketing has rendered traditional advertisement strategies like posters and newspaper listings as not good enough. Also, to leverage social media marketing, certain people and locations must be targeted, as painting a broad stroke on the internet is not feasible and a waste of money.



Resolution

- Resolves the main character's problems with solution
- LBI dashboard resolution example:
 - As a result, consultant John Sokol created a Tableau dashboard of public tax record data to determine LBI home owner groups of primary residences. These trends are leveraged strategically to target potential buyers or leads with Facebook, Instagram, and Google ads in locations where many people already own property like Medford NJ, Saddle River NJ, and Yardley PA.



Setup

Effective marketing and advertisement is the backbone of a great real estate business. For RE/MAX of Long Beach Island, in order for people to buy homes, they must know about the opportunities available and the benefits of owning property at the Jersey Shore.



Conflict

However, the advent of website and social media marketing has rendered traditional advertisement strategies like posters and newspaper listings as not good enough. Additionally, to leverage social media marketing, certain people and locations must be targeted; painting a broad stroke on the internet is not feasible and a frivolous waste of money.



Resolution

As a result, consultant John Sokol created a Tableau dashboard of public tax record data to determine LBI home owner groups of primary residences. These trends are leveraged strategically to target potential buyers or leads with Facebook, Instagram, or Google ads in locations where many people already own property like Medford NJ, Saddle River NJ, and Yardley PA.

Another setup, conflict, resolution example

Wizard of Oz

- Setup: There is a little girl living on a farm in Kansas, **and** her life is boring.
- Conflict: **But** one day a tornado sweeps her away to the land of Oz.
- Resolution: **Therefore** she must undertake a journey to find her way home.



Help yourself tell the story

Horizontal logic

- For a presentation, you can read just the slide titles; together these snippets tell the overarching story
- Executive slide summary up front to establish viewer expectations

Vertical logic

- The content reinforces the title and vice-versa
- No extraneous information on the slide



Communicating data stories blog post

Read as part of items due for next week (assessed on quiz 6):

- <https://sokolj.com/Communicating-Data-Stories/>



Final project

Brainstorming (10 points)

- Research question and dataset submission (due 3/29)
- ABT and Dobzhansky template (due 4/5)

Presentation (5 points) and consultation (5 points)

Tableau dashboard (30 points)

R visualizations (15 points)

Research write up (35 points)



Final project brainstorming (due 3/29)

- Think of a **Research Question** to investigate through a Tableau dashboard
 - Example: What is the average monthly rent for each neighborhood in Philadelphia?
- Find a **dataset** online that pertains to the topic and can viably answer the research question, preferably with many data fields to stratify the data
 - Kaggle: <https://www.kaggle.com/zillow/rent-index>



Week 9 items due 3/29 @ 11:59pm

Quiz 7

- Chapter 7: lessons in storytelling
- Communicating data stories blog post

Discussion board 7

- Your thoughts, comments, and opinions on the chapter 7 reading

Final project brainstorming

- Submit research question
- Submit a viable dataset that could answer your research question

