



DATADVENTURES → EPISODE 1: RESCUING A DATA VISUALIZATION

by Data Man a.k.a Jorge Andrews

It's just another typical Tuesday morning at the Tobacco Control Evaluation Center office in Davis, California. The help desk guru sits contemplating ways to streamline data collection and reporting for local lead agencies in Tobacco Control throughout the Golden State. This moment of intense meditation is interrupted by the banshee shriek of the Assistance Alarm Apparatus, more commonly referred to as the phone. "Hello?" he answers. A plea for help comes from the other end of the line.

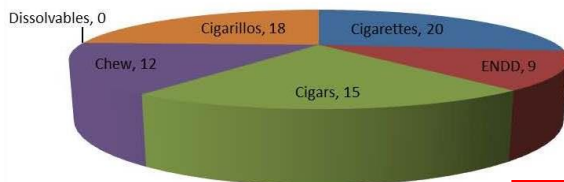
At this moment, the mild-mannered help desk guru quickly transforms into Data Man! Although the forces of Mayhem and Disorder intend to inject chaos and confusion into the work of tobacco control projects, Data Man and his allies are on the job to help counter these foes. But can these evil twin nemeses be stopped in their tracks this time? Members of the Data Alliance will have to devote all their powers of perception and problem-solving to overcome this menace.



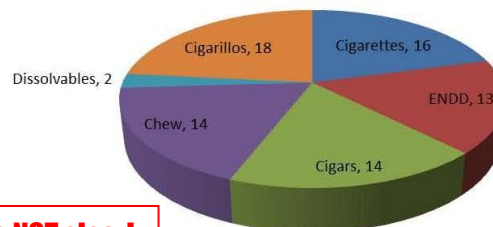
Evil nemeses Mayhem & Disorder

Safari County did an amazing job with their data collection efforts, but now it's time to utilize their data for moving policy options forward. The LLA is working on a pharmacy objective and would like to show which tobacco products pharmacies are selling. In looking at the data, they noticed that more pharmacies than tobacco-only retailers in Lion City were selling certain tobacco products. But this key finding just wasn't coming through clearly in the comparative pie charts they came up with (pictured below). So they sent out a distress signal to the help desk.

Lion City Pharmacies Selling Tobacco Products



Tobacco Outlets in Lion city Selling Tobacco Products



Message NOT clear!

Data Man signals to get the attention of colleague Data Vizard. Together they begin to analyze the problem. Data Man notices that the 3-D pie charts don't make it easy for the eye to determine comparisons between the two store types. Also the labeling does not make clear what the charts represent. Data Vizard points out there is no clue what the key message of these visualizations is. Boy, did Mayhem and Disorder wreak havoc on this data! Although, at first glance, fixing this visualization seems like it might prove to be a challenge, never fear. This Data Duo is up to the task!

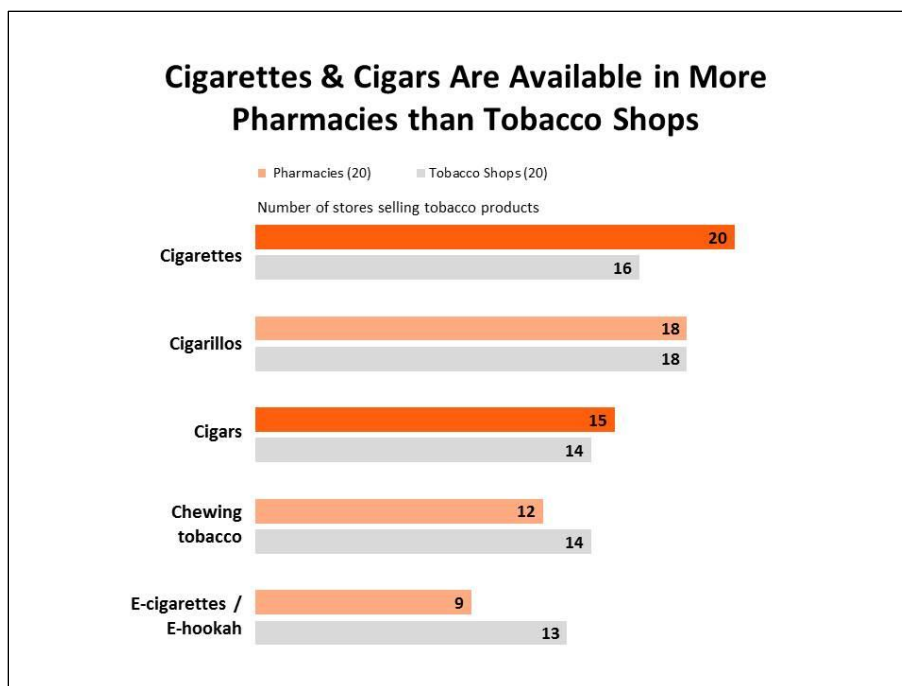
DATA VIZZING

Data Vizard says to Data Man, “For starters, we must get rid of this pie chart comparison. That simply will not do. We must also get rid of this assortment of colors. They draw attention away from the key message. And those tiny labels are making my eyes bleed! The viz must be clear and simple, keeping the audience focused on what the project wants to them know.”



Data Man digs through his utility folder on his Data Machine to find the right data visualization tool for this project. He opens the data set in Excel and does a little reorganizing, creating a table of results for each product by both store types. He tries several different data formats and styles and finally decides that the comparisons will be easier to see in a horizontal bar chart where the pharmacy data is paired with the tobacco shops for each product.

Data Vizard suggests removing a few of the less prevalent products so the visualization is less cluttered. Also she creates a title that states the key message so it's obvious to viewers. With a few more flourishes and tweaks, here's what the Data Duo come up with:



It's a simple bar graph comparing the two store types. It is clearly labeled, and uses basic colors to distinguish categories and to highlight the key finding – the fact that more pharmacies than even tobacco shops are selling cigarettes and cigars. That should catch the eye of community members, policymakers and pharmacy owners and managers! Now Safari County has a data visualization that serves as a launch pad for presentations, handouts and meetings.

The forces of Chaos and Mayhem attempted to infiltrate a Prop-99 funded tobacco control project today, but they were once more foiled by the efforts of the dynamic Data Duo. Until next time....