Data Story

Hello everyone, I hope you are all well today. My name is Katlynn Rose. I am an aspiring Data Analyst with a background in marketing, sales and customer service. Before we get into the presentation, I would like to tell you a little bit about me. At the beginning of my educational journey with NEU, I had no prior experience with the intricate details of Data Science. However, I am curious by nature and have a long history of research and study into topics of interest stretching back to my childhood. A love of knowledge has driven me forward to this point in my professional life. Along this journey, I have discovered a passion for all the different working parts of data science in general. I endeavor to continue my education, even after obtaining employment as there is still so much to learn and expand my knowledge on. Data science is a truly fascinating and enjoyable career path that I look forward to exploring.

Now, onto the project. I chose to do my final project on the US Honeybee population because honeybees are such a vital resource for Humanity. I obtained both datasets from Kaggle and they are public datasets. I will violate no code of ethics nor data privacy laws by sharing these datasets with you all today. All sources are cited in the appendix of my presentation, so no copywriting laws have been violated in the course of making this project.

{Start reading the project lines}

Chart 1- I utilized Tableau for the creation of the following charts. This dashboard highlights the alarming drop in production and by stark contrast, the rapid rise in production values over the past 20 years. Prices have risen due to maintenance costs rising. According to the USDA, beekeepers are going through 3 times the amount of queen honeybees each year compared to previous years. It once took 500 queen bees each year for an average sized colony. It now takes 1,500. A clear indication that something is amiss with the US honeybee population. Discuss figures. Use trigger words like “alarming” and “massive drop”. Cliffhanger, “What is causing this alarmingly massive drop?”

Chart 2- In this chart, the increasing gap between production and production value can be seen. The rise in production cost has clearly trickled down to the consumer. I know in my area of the country; the shelf price of honey has doubled in the last 5 years. The same honey I bought for around 7 dollars a few years ago, is now a staggering 14 dollars.

Chart 3-This Dashboard shows the 44 states currently producing honey and their average production numbers. What is troubling about the information this chart shows, is how few states produce sufficiently high volumes. Of course, one must consider local weather, available space for honeybee colonies, nutrition resources for said colonies and many other details that are deciding factors in honeybee colony placement. However, it is still troubling to see, given the dramatic decreases in production over the past 2 decades. There does appear to be a correlation between colony size and production. However, more research is required before a true connection can be established.

Slide 11- I utilized Salesforce Analytics to show the breakdown of production values by state. The top earner is California, runner up is Florida and in third place is Minnesota. Michigan is the last state to reach 100m in production value. States whose production values do not number in the millions have been excluded.

Slide 12- Salesforce Analytics has been utilized again here to show colony population by state. Once again, California, Florida and Minnesota are the top three states with the largest honeybee populations.

Slide 15- In this slide I have created a chart to show the rates of Neonic pesticides currently in use in the United States. This is only one pesticide of many, however, it is the most commonly used one that is being examined closely by scientists. Neonic pesticides have been cited as a cause in disruption of bee sleeping patterns. I think I can speak for most of humanity when I say, “Who works well on disrupted sleep?”. Pause for chuckles. One can see the three states that have the highest use of Neonic pesticides are Illinois, Iowa and California.

Break out into study on web page- Discuss charts that contain honeybee losses.

Finish reading the slides and we did it!! GREAT JOB!