Data Science Case Study:

You have recently been hired as the Director of Analytics at a retail company called DresSmart Inc. that specializes in apparel and clothing. Three weeks after starting, the chief marketing officer of the company come rushing to your office looking unusually worried. The board of directors has given her hefty targets for sales and slashed her marketing budgets at the same time. You immediately identify that you are dealing with the common business problem of improving business revenue with reduced cost. To state the business mandate in a different way, the need is to maximize cumulative value generated by customers while minimizing total marketing cost. You have also realized that this is a great opportunity for you to establish analytics practices in the company since there is a quick opportunity for you to improve the P&L statement.

Immediately your mind formulates a plan to execute a simple Media-Mix-Model analysis to improve marketing results. While leading-edge companies are utilizing 'unified marketing measurement platforms', you have concluded that DresSmart Inc. should start on a smaller scale with a conventional Media-Mix-Model solution. After that has been adopted, you will have the political capital to push for attribution-modeling functionality and eventually a fully integrated marketing measurement platform which can be launched at the same time as DresSmart's re-branded website.

You explained to the CMO that the analysis will have an impact on the ROI of future campaigns i.e. you will reach out to the right set of customers and generate maximum value. Additionally, there is an intangible benefit of this exercise i.e. reduced customer dissatisfaction from ineffective offers and ads. The CMO left you as a much less worried woman than when she entered your office and asks you to present your findings in two weeks.

After the analysis is complete, you need to create a presentation to share your results and recommendations with the CMO. While you have given many presentations in your career, the last five years of your time was spent supporting e-commerce leaders at a different company with advanced machine learning and statistical knowledge. In contrast, the CMO grew her career through the sales and business development side of the organization, before accepting the CMO role. She is bright, experienced and has an MBA from a reputable school, but has not focused her career on understanding nuanced quantitative methods. Put together a presentation which will resonate with this business stakeholder.