# Task 3 - **Present Data Mining Activities to CEO and Report on Lessons Learned**

* **Present data so that everyone can grasp the insights**. Hint: never show a regression analysis or a plot from R. In fact, our final presentation had very few numbers. We focused on telling a clear story with simple slides and visuals. While we used regression analysis to find a list of significant variables, we visualized data to find trends: even data analysts are much better at discovering geographic (and underlying demographic) trends on maps than in regression tables, especially when there are multiple underlying patterns with ambiguous relationships.
* **Return to the data with new questions**. Once we learned who our most engaged members were, we returned to the data to see what campaigns those members liked best; in other words, what led those members to get involved. The answer turned out to be campaigns around improving community health, an issue that disproportionately impacts minorities. This information allowed us to better tailor our volunteer campaigns going forward to engage new members, reach out to the right partnerships for those campaigns, and also highlight another potential area for growth — white, male college students in the Northwest.
* Jim Stikeleather segments listeners into five main audiences: **novice, generalist, management, expert and executive.** The novice is new to a subject but doesn't want oversimplification. The generalist is aware of a topic but looks for an overview and the story's major themes. The management seeks in-depth, actionable understanding of a story's intricacies and interrelationships with access to detail. The expert wants more exploration and discovery and less storytelling. And the executive needs to know the significance and conclusions of weighted probabilities. Discerning an audience's level of understanding and objectives will help the storyteller to create a narrative. But how should we tell the story? The answer to this question is crucial because it will define whether the story will be heard or not.
* A good example of a hybrid author-reader approach is the presentation of [The Customer Journey to Online Purchase](http://www.thinkwithgoogle.com/tools/customer-journey-to-online-purchase.html) tool. A few short paragraphs explain why the tool was created and how it works, and an interactive chart allows marketers to break down the information by industry and country. Additional interactive data visualizations provide even more context.
* Another extremely efficient and visual way to tell a story is by using maps. In a [tutorial on visualization](http://online-behavior.com/analytics/visualizations), I show how a large data set can be transformed and incorporated into a story. It's an example of how to take charts and graphs to the next level in order to add value to the story. In this case, I use Google Fusion Tables and some publicly available data to illustrate analytics data with colorful, interactive maps. The visualization provides more content for those interested in diving deeper into the data.
* A good data visualization does a few things. It stands on its own; if taken out of context, the reader should still be able to understand what a chart is saying because the visualization tells the story. It should also be easy to understand. And while too much interaction can distract, the visualization should incorporate some layered data so the curious can explore.
* Just like writing or speaking, in data design you want to keep things succinct and to the point. This allows the important message to shine through. A good visual encompasses both brains and creativity.