

## Assignment feedback: Toby Draper

### What you did well:

- You provided useful context for the presentation and described the dashboard's main goal, which helps orient the audience.
- You documented a problem-solving approach in the report (good use of a framework) and clearly stated the main problem up front.
- Visual consistency: you kept a consistent palette across figures and added helpful labels (notably on the age figure), improving readability.
- You identified meaningful patterns (e.g., highest earners) and summarized main patterns clearly in the report.
- Good treatment of ad analysis: you analysed how ad conversion changes by demographics and explored ad × product relationships.
- You demonstrated awareness of statistical caveats (noting that some patterns may be driven by small groups) and suggested checking group sizes.
- Actionable thinking: you proposed tactics (discounts via social media, surveys, increased granularity) and named metrics to monitor.
- Report structure: you added a table of contents and described data-cleaning steps and dashboard design considerations, which aids reproducibility.
- Dashboard discipline: thoughtful use of filters and an overall coherent dashboard design were evident.

### Areas for growth:

- State key questions and framework earlier: open the presentation with the specific business questions you'll answer and explicitly mention the problem-solving framework (do this before maps/visuals).
- Rethink the map: with few countries, consider a different chart type (bar or dot plot) and add relative metrics (per-capita or per-customer) alongside absolutes to account for volume differences.
- Show distributions first: present overall age and income distributions (counts/histograms) before correlation plots (age vs income) so viewers understand group sizes and where bins may be needed.
- Relate demographics more broadly: connect age/income correlations to other variables (education, etc.) and show customer counts per group to judge robustness of results.

- Split or reorganize complex slides: consider splitting “ad vs product spend” into two slides for clarity, and avoid repeating the same chart four times—use one chart with a dimension selector/filter instead.
- Link ads to revenue by product: add analysis showing which channels drive spend for specific products (e.g., alcohol), not just conversions.
- Check small-group effects: for recency/frequency boxplots and the 90k/deals pattern, verify group sizes so you can tell whether patterns are data-driven or sample-noise.
- Clarify ambiguous visuals & metrics: explain how ROI/other metrics were computed and what “online vs category mix by age” intends to show. Fix disappearing/buggy animations.
- Make recommendations operational: when proposing discounts or channel shifts, specify which channels, target groups, pilot design (A/B), and the KPIs/thresholds you would use to judge success.
- Explain survey & granularity goals: state what you hope to learn from any proposed survey and how increased data granularity will change analysis or actions.
- Expand report detail: add more on data cleaning (specific steps, outliers, missing-value handling) and the rationale linking each chosen figure to a business question.
- Increase dashboard filters & reduce repetition: add purposeful filters that enable cross-variable exploration (product → see ads by demographic) instead of repeating near-identical plots.
- Improve chart choices & labeling: where volumes differ, show proportions or per-customer metrics; replace maps or stacked bars where they obscure comparisons; ensure all labels are legible..

This assignment demonstrates strong structure, clear goals, and effective use of visuals with consistent palettes and labeling. You successfully highlighted patterns, such as insights into high earners and ad conversion by demographics, and provided a well-structured report with a problem-solving framework, table of contents, and thoughtful dashboard design. Your recommendations show awareness of actionable strategies and monitoring metrics. To strengthen your work, consider stating business questions earlier, adding relative metrics for fairer comparisons, and connecting demographic variables more broadly. Reducing figure repetition, improving clarity in some visuals, and making recommendations more detailed and operational will further enhance impact.