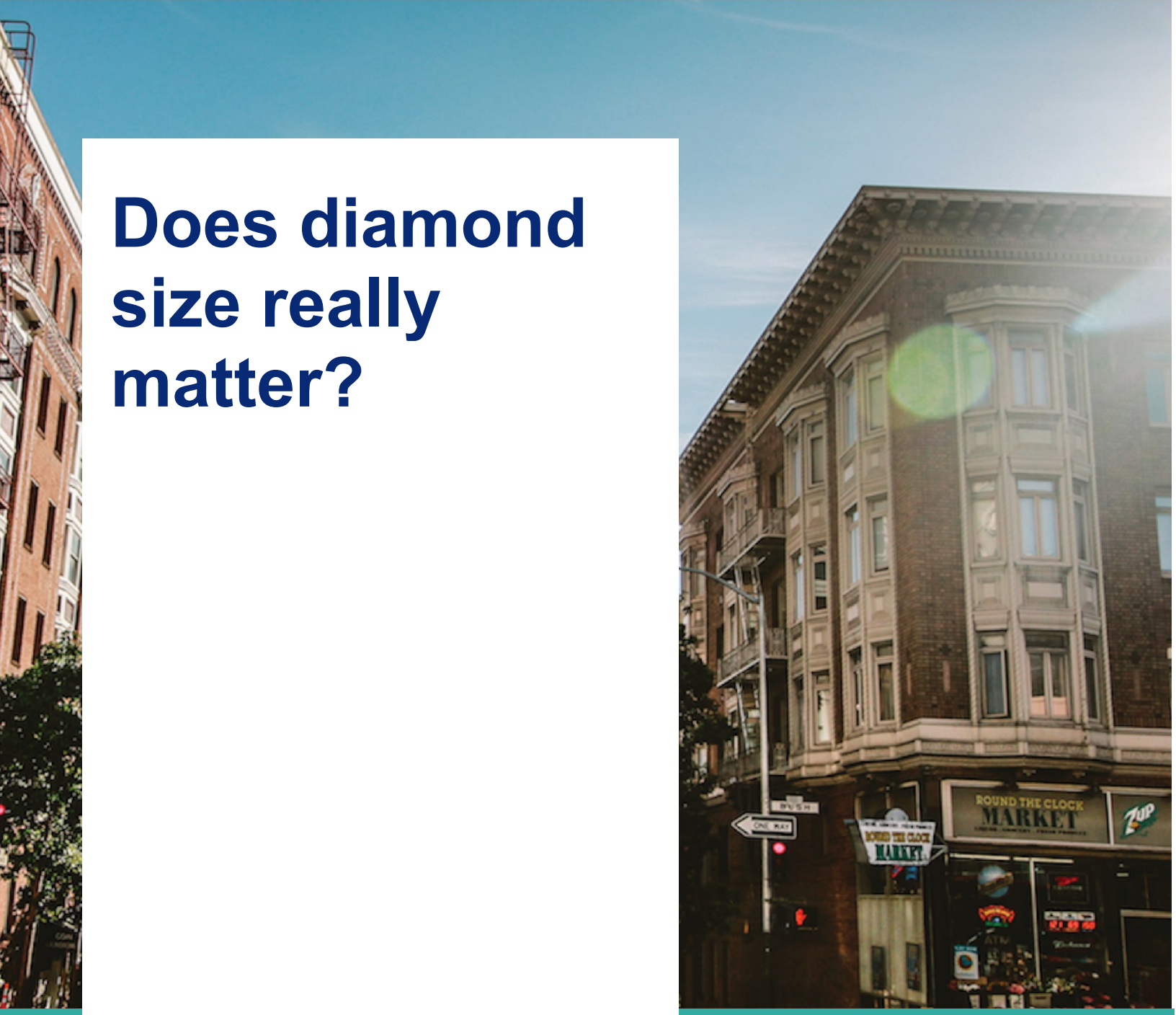

Does diamond size really matter?

31 MAY, 2021

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Assessment 2, Data Visualisation & Communication

Source: https://tinyurl.com/rbm3y59z

Word count: 750 words

Prepared in accordance with (UNSW Business School, 2020)

The data set & motivation

The data set: "Does Diamond Size Really Matter For Engagement Rings" (Shane Co, 2021), is a survey of 3,462 Americans. The survey was across all demographics and all US states, to create four static visualisations:

1. The states where large diamonds matter most,
2. A demographic breakdown of the importance of the diamond size,
3. The most important feature of a diamond ring, and
4. Business insights and statistics.

The visualisations can be found in Appendix A. The motivation for choosing this data set is because it explores the principles of UX design and communicates business insights well.

Data story critique

Data storytelling brings insights *"via a narrative, often enhanced by data visuals, in order to enlighten an audience."*(Dykes, 2019). As these are static infographics, the data story presented flows through a series of connected elements: geography, demographics, features, and business statistics, forming an engaging narrative for the audience. One example is the effective utilisation of ***hand icons*** holding, receiving and rejecting rings.

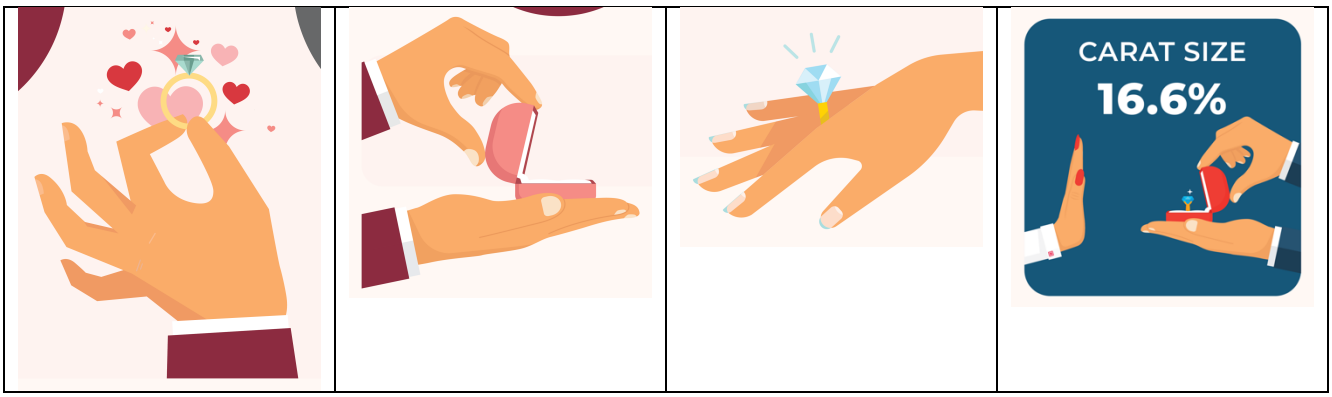

Figure 1: The visualization effectively utilizes emotion to communicate data – in this case, the use of hands purchasing, presenting, receiving and rejecting the diamond engagement ring.

Central insights include:

- A diversity of views of engagement rings based on geography,
- Men care about diamond size more than women,
- People engaged or married care more about diamond size than people single or divorced,
- Diamond size is less important than diamond shape, and
- A large market exists for upgrading engagement rings.

Analytical methods

The visualisations use a set of graphic tools, such as doughnut charts (Duarte, 2014), and a harmonious, finite palate (Sanocki Noah, 2011), which increases short-term memory retention. They avoid the pitfalls of 3D graphics (Szafir, 2018) and use miscellaneous diagrams sparingly.

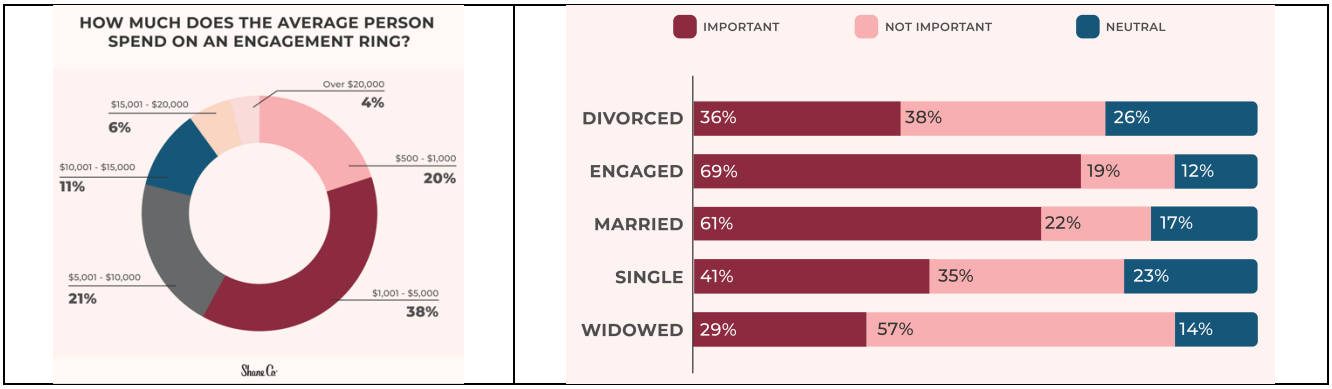

Figure 2 two examples of the clear, simple data visualizations, with a common subdued palette, without "chartjunk" such as unnecessary shading or 3D effects.

Unity and Variety

There is a unity of shape and style within the visualizations, especially the type, headings and colours, but there is also variety – each infographic has a unique element (the map of the US, the 100% stacked bar chart, the rounded corner tile elements and the use of people).

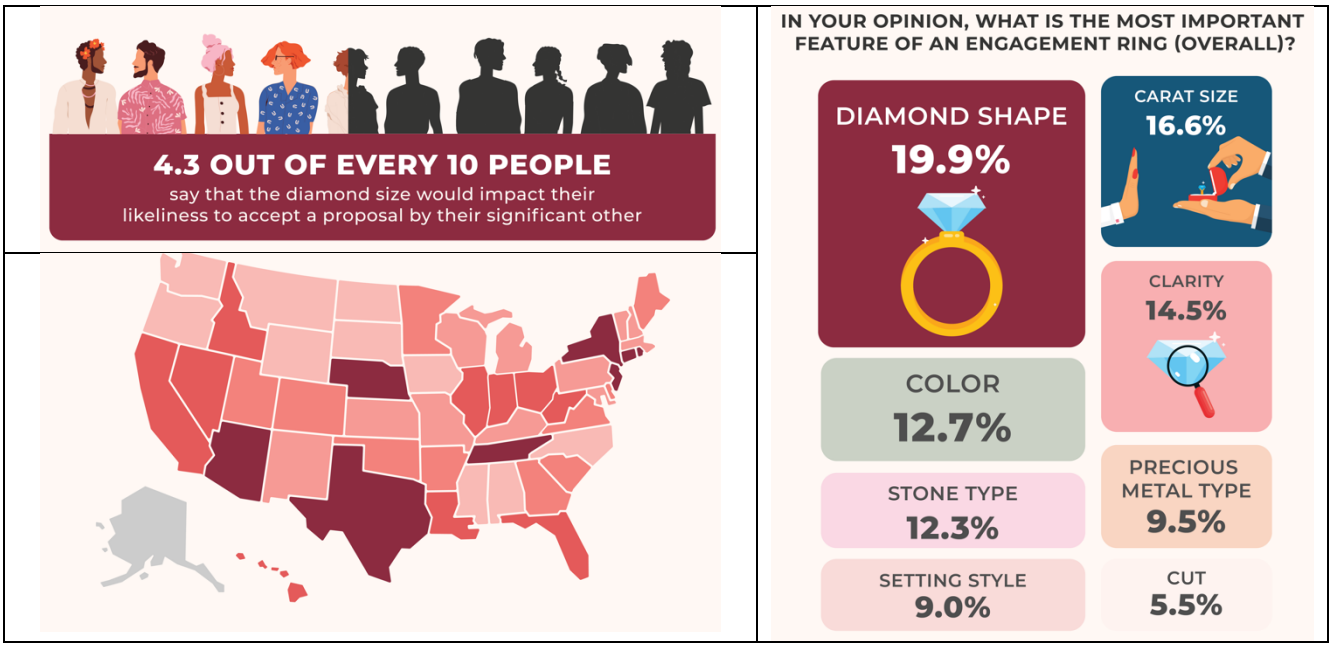

Figure 3 gives examples of the variety of data elements including the use of geography, tiles and people.

Hierarchy and Dominance

The hierarchical structure is from top to bottom, with an exaggerated aspect ratio for each infographic. The primary message for each infographic is about 1/3 from the top, usually a short text message, with larger and brighter contrast.

Economy of Elements

The visualisations are "purposeful, relevant, and information-rich" (Unger, 2009), with only two or three pieces of information each. There is an economy of text, usually only a single sentence, with the graphics doing the work. There is little "chartjunk" (Tufte, 1988), without unnecessary ink, gradients or colours to distract from the data.

Proportion and Balance

Grids are used to give a sense of proportion and balance, and to draw the eye to the most important pieces of information. Occasionally, the designers break the grids to emphasise important information (such as Visualization 3).

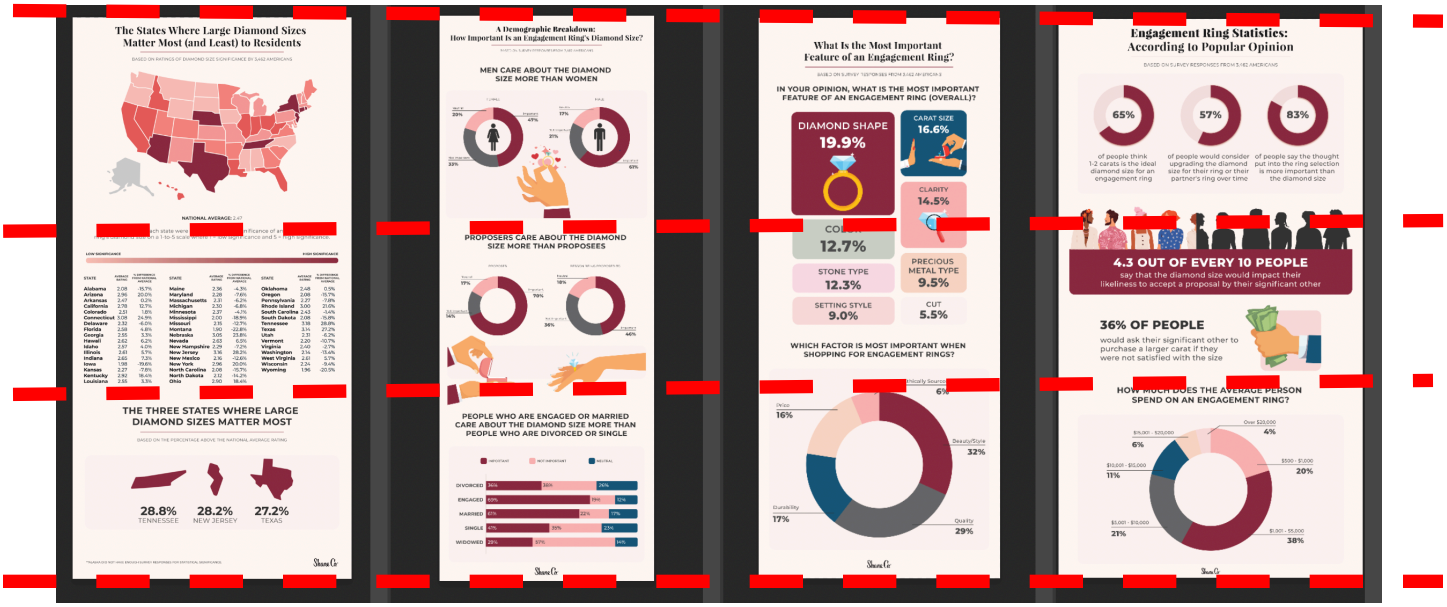

Figure 4 shows the four visualisations side-by-side. Note that they have an exaggerated vertical aspect but are effectively divided into three. This grid gives a consistent balance but is broken occasionally to highlight important information.

Shortcomings

The infographics explain the information well, with the exception of the first visualisation, which details how important engagement rings are in various US states:

- There is no interpretation of the variation of importance across different states.
- The table lists importance in state alphabetical order, rather than sorted by importance. While this makes finding a state easier, it does not allow for connections between states, missing important insights.

Another shortcoming is that the infographics have a heteronormative approach – where men are marrying women. This tends to miss the business opportunity of LGBT marriages.

Recommendation

While the overall user experience, including design, information hierarchy, colour and stakeholder value is well done, the visualisations could be improved by:

- Fixing or removing the table of states in the first visualization. The table is confusing, and little actionable business data is communicated.

- Show data for the large and rapidly growing LGBT market. That would be an important business sector to penetrate.
- Break out the data by age, race and other demographic information to allow more precise selling.

A number of business benefits of the visualization can be found from the data to deliver better match buys with products, and increase revenue:

- Men who propose marriage are more likely to purchase a larger ring. This information may can guide salespeople, increasing revenue.
- When creating advertising, it is beauty, style, shape and quality which are perceived to be most important, while ethical sourcing and price are perceived to be the least important. This data should be used in further content creation.
- That there is a large secondary market to upgrade existing diamond engagement rings – an advertising campaign may be able to capture such a market.

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Appendix A – Visualisations

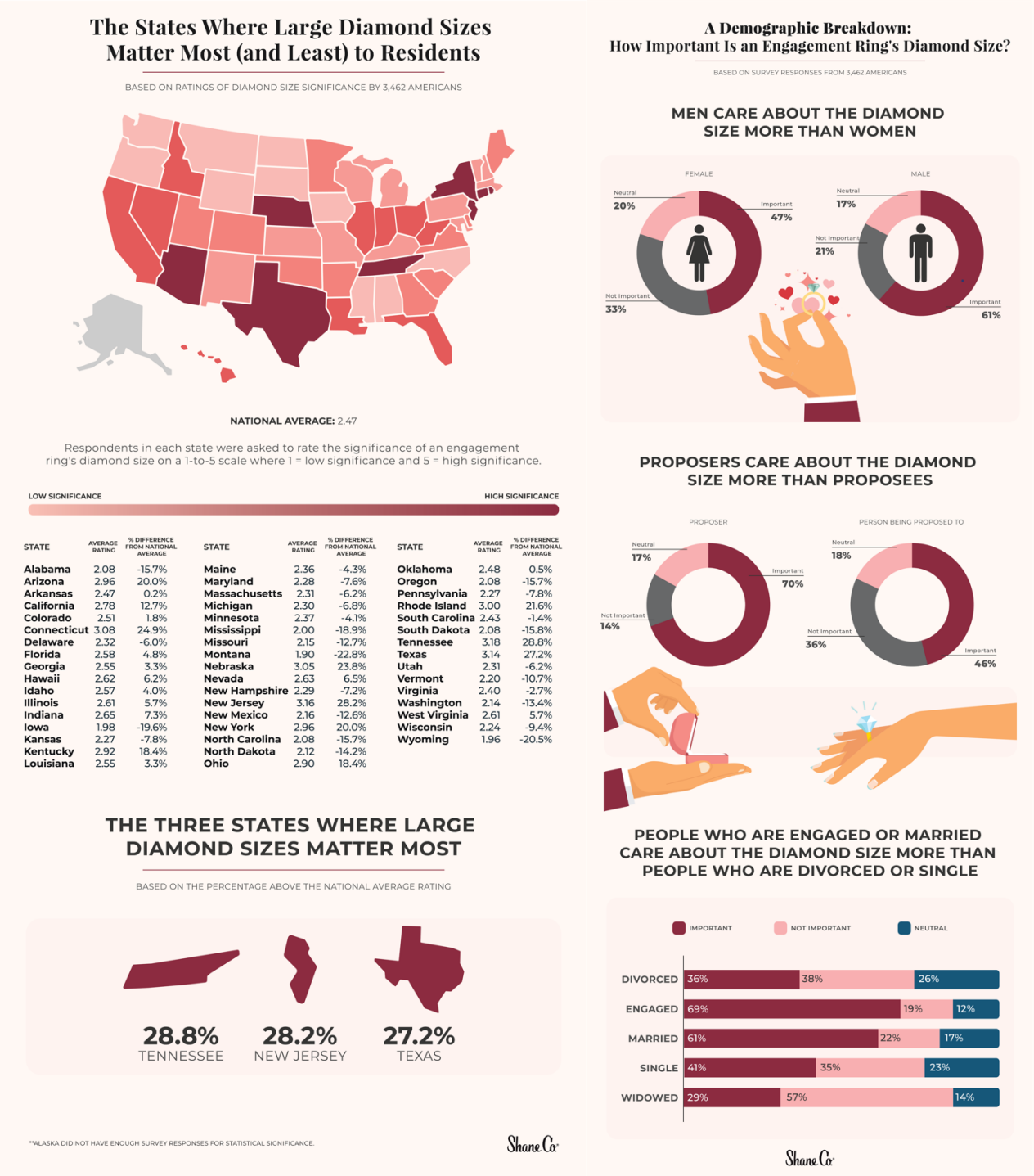

Figure 5: Visualisations 1 and 2.

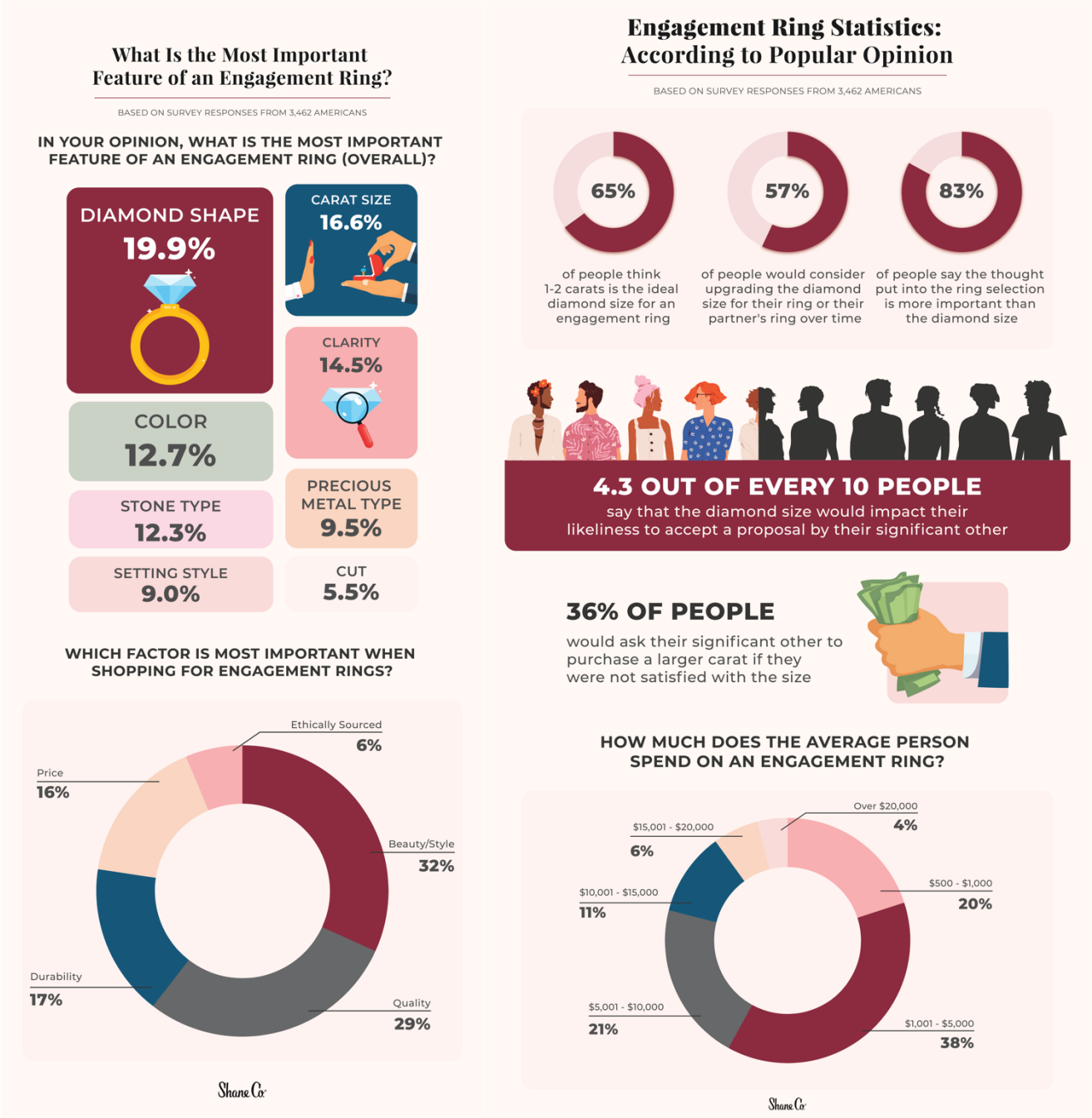

Figure 6: Visualisations 3 and 4