To adopt the **data visualization best practices** and **data storytelling methodology** in manpower reporting to communicate key insights effectively to target audience, especially for reports prepared for Senior Management. The SHR Planning Team took on the project to revamp HR reports to **facilitate cognitive processing** of data and charts and present context, insights and interpretation in easy to digest format.

**METHODOLOGY**

The SHR Planning Team identified suitable training courses and read up online to build up knowledge and skill sets in the area of data reporting and analytics. Immediately after the successful completion of a data storytelling course, the team decided to embark on the project to review identified HR regular reports. In addition, the team decided to adopt the data mining approach for HR reporting, where information is presented based on insights surfaced during data processing and analysis rather than replicating all charts in the regular report for all identified data dimensions (i.e. previous method used to prepare regular reports).

The following **principles / techniques** were applied when revamping the reports to facilitate cognitive processing of data and charts:

1. **Know your audience**: Focus on the big ‘Takeaway’
2. **Appropriate Chart Type to show data clearly**
3. **Good data-ink ratio**: Remove elements in charts that are not necessary to comprehend the information represented on the graph
4. **Use Colour Intelligently**
5. **Gestalt principals of visual perception**
   - Proximity: e.g. place label at the end of the chart instead of using legend
   - Similarity: e.g. using same color for labelling to represent association
6. **Appropriate dimension, axis scaling and perspective**
   - E.g. avoid 3D charts that could lead to visual bias
7. **Insight statements**
   - Instead of chart title at the top of slide to capture audience’s attention

**RESULT**

![Three manpower reports were revamped in 2018:](image)

- SingHealth Human Capital Report
- SingHealth Medical Resignation Report
- SingHealth HQ Resignation Report

The revamped manpower reports went beyond reporting numbers and allowed us to tell a **story** with the HR data about the state of human capital in SingHealth.

Instead of only reporting the usual dimensions using the same charts in the manpower reports, reports are prepared based on **fresh key insights** uncovered.

With the clean and neat format of the revamped reports, audience are able to make the most out of the visual representation in the reports in a reduced time. The **informative reports** helped to track important HR metrics and could facilitate decision making if needed.

**Conclusion:** Good data visualisation is important to facilitate decision making where succinct presentation of facts is crucial.

Many thanks! I like the new format. (Med Dental Resignation Report)

Very nicely done with lots of useful info presented in a clear way! (Human Capital Report)

Wonderful slides and very clear! (SingHealth Resignation Report)

Compliments from Senior Management

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Transforming HR Reporting: Data Visualisation and Storytelling

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“Data is to Storytelling as the brick is to building.”
- Reid Genauer, Chief Marketing Officer at Smule, Inc