



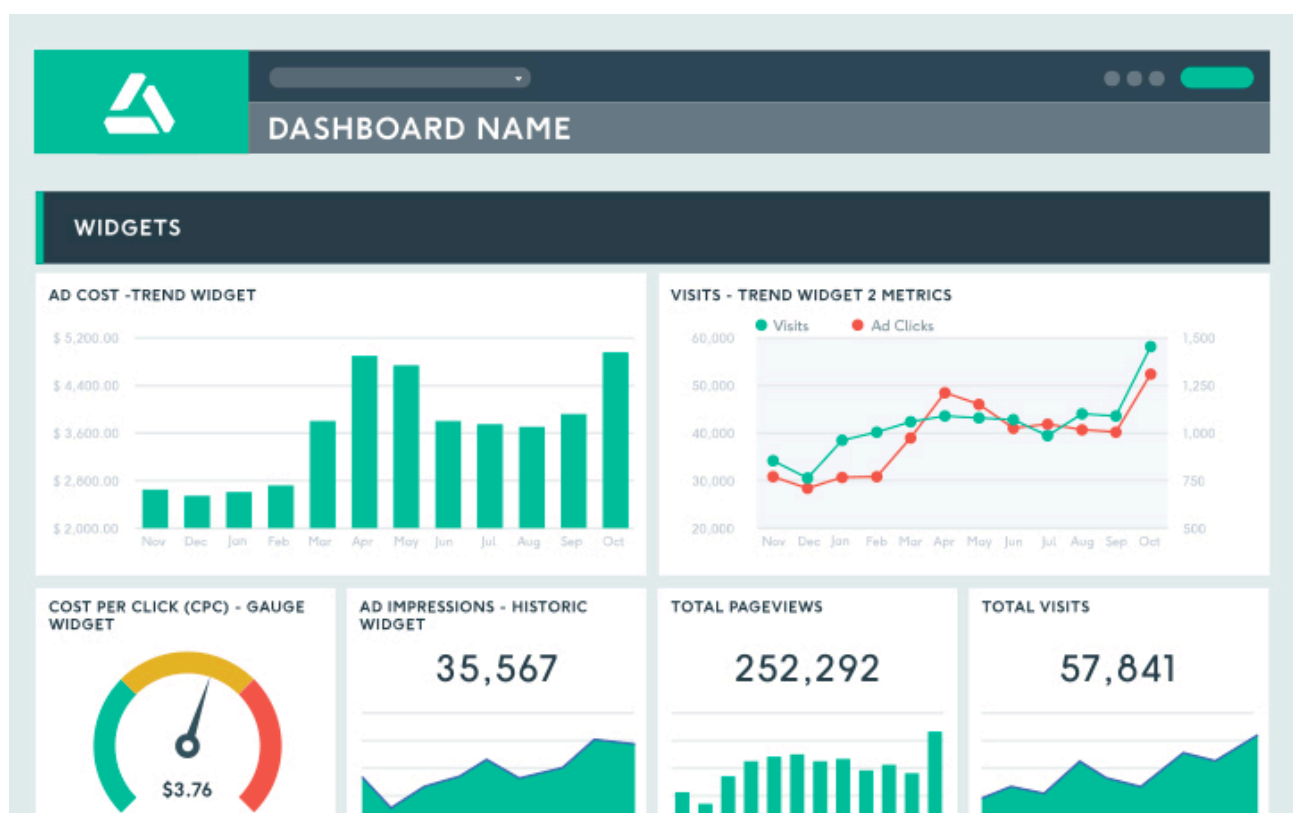
Literature Study

Data Visualization for Dashboard Reporting: The Essentials

The purpose of this document is to provide a brief introduction to data visualization and the importance of properly charting and projecting data results. Will be used as main focus point when considering designing on how data is projected.

What is dashboard reporting? It is the process of monitoring and reporting the performance of a business via data visualizations, based on relevant parameters (metrics/KPIs). Dashboard and reports differ in several aspects:

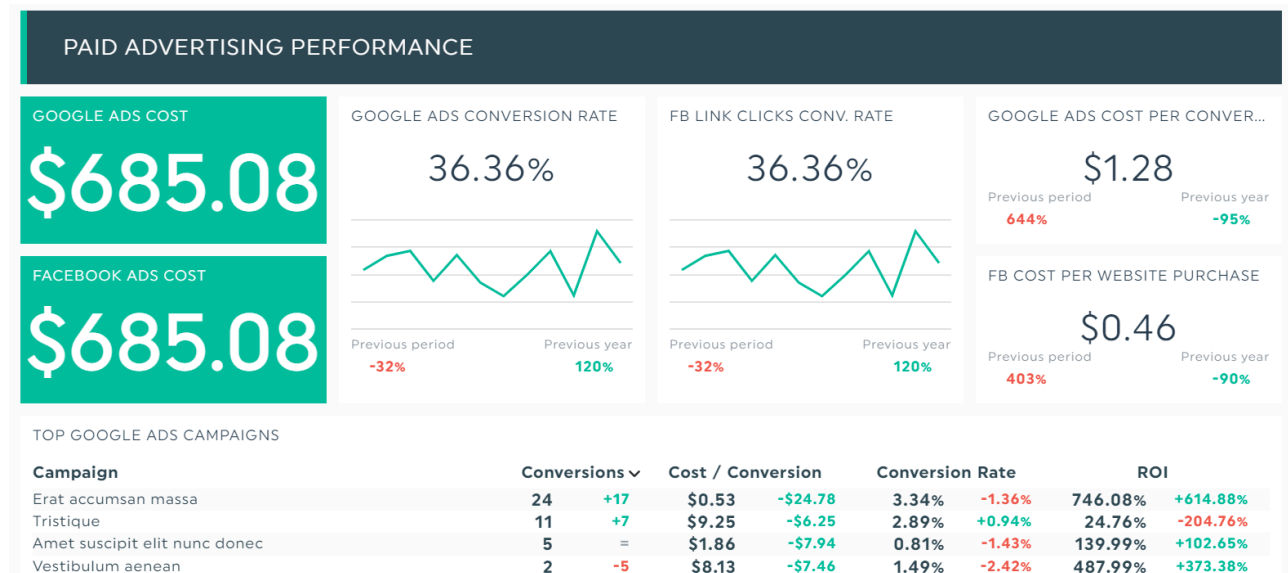
1. Reports are static, only displaying historical data.
2. Dashboards tend to display all charts, data, graph in one screen, streamlining your overall performance.
3. Reports usually cover a specific topic, and are longer and more detailed than dashboards.



Several types of dashboard reporting:

1. Analytical

Essential tools for analyst to draw conclusions on business performance. Usually digested data into simpler visualizations of representation.



2. Strategic

Helps monitor overall strategy performance; includes Key Performance Indicators (KPIs) and metrics to enable management of teams whether they are on the right track.

Business Operations Dashboard

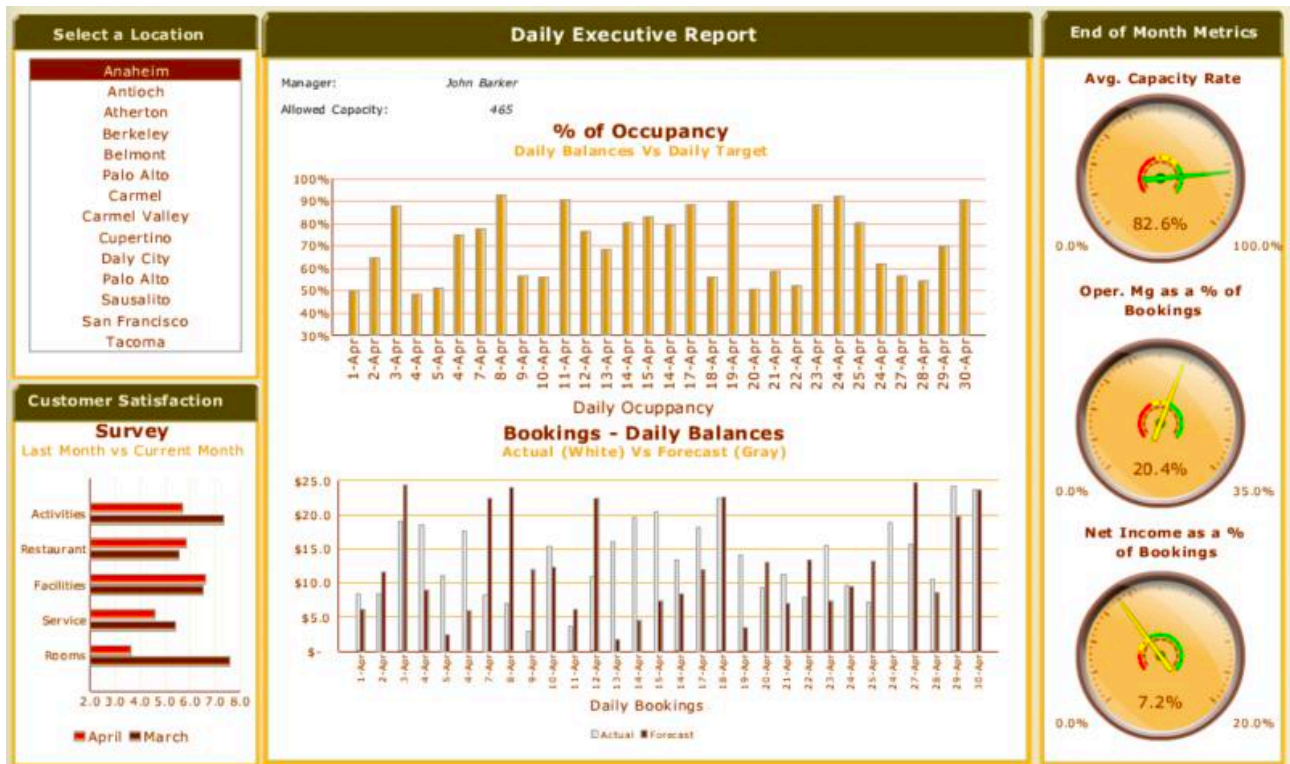
This slide shows dashboard for measuring business operations. It includes details of total production, weekly average production, scrap and scrap average in each production line. It also covers daily production statistics, production trend, project summary, events and distribution.



This graph/chart is linked to excel, and changes automatically based on data. Just left click on it and select "Edit Data".

3. Operational

Used to monitor business operations; presenting real-time data and are very detailed.
Focuses on day-to-day operations.



4. Tactical

Enables deeper dive into more detailed datasets to identify trends and get more information.

Based on geckoboard, the tips for good dashboard design are:

1. Clarify your goals - the purpose of your board should guide its design.
2. Prioritize important information - all content should align with your board's objective.
3. **Optimize data-to-ink ratio** - avoid decorative elements that do not convey meaningful data.
4. Round off numbers - excessive precision can obscure key insights.
5. Choose the most effective visualization - a good visualization should be easily understood.
6. Group related metrics - organize your metrics for easy reference.
7. Ensure consistency - using consistent visuals and layouts facilitates comparison.
8. Use size and position to indicate importance - make it easy for viewers to identify key information.
9. Provide context for your numbers - help your viewers interpret data by providing relevant context.
10. Use clear labels for your audience - keep labels brief and self-explanatory.
11. Remember your audience - it is acceptable to break conventions to increase engagement.
12. **Continually refine your dashboards** - regularly assess whether your dashboard is driving the intended behavior.

Bibliography

Zaric, S. (2023, March 16). *What Is Dashboard Reporting: 101 Guide* | *Databox Blog*. Databox. Retrieved March 20, 2023, from <https://databox.com/dashboard-reporting-best-practices>

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