Dashboard Development Playbook / Style Guide

**Analytics & Insights Team’s internal “style guide”, which is still in development but still robust.**

**URL: https://greendot.atlassian.net/wiki/x/xIUcQ**

**A playbook for designing analytics dashboards that are trustworthy, instantly understandable, and visually elegant—from first sketch to partner‑ready polish.**

**1 · Design Philosophy**

1. **Purpose before pixels** – Every view must answer a concrete business question. If you cannot finish the sentence *“Stakeholders will use this view to \_\_\_\_,”* rethink or remove it.
2. **Cognitive efficiency** – maximize the information‑to‑ink ratio; delete anything that does not carry meaning (gridlines, drop‑shadows, decorative icons). This principle stems from Edward Tufte’s concept of chartjunk.
3. **Hierarchical scanning** – Position the most critical information in the upper‑left (Western F‑pattern) and give it visual dominance. Stakeholders decide within seconds whether to engage further.
4. **Context + comparison** – Numbers rarely speak on their own. Provide baselines, targets, or previous periods so users know whether the result is good or bad. BANs should ship with context (e.g., Δ vs LY).
5. **Accessible, brand‑consistent aesthetics** – Use a restrained, high‑contrast color palette and prefer shades of a single hue over many hues.
6. **Text as a design element** – Descriptive titles, informative subtitles, on‑chart annotations, and micro‑copy that instruct users dramatically improve comprehension.

**2 · Process Workflow**

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| --- | --- | --- |
| Stage | Key Actions | Deliverables |
| **Discover & Define** | – Identify decision‑makers, their data literacy, and the core metrics/questions.  – Translate questions into concrete KPIs and user stories. | Audience persona, KPI list |
| **Model & Validate** | – Build metrics in dbt as fully tested, documented models.  – Profile source tables; reconcile totals against trusted systems. | Certified dataset (all dbt tests green) |
| **Wireframe & Prototype** | – Sketch a two‑ or three‑row layout using style‑guide templates.  – Place BANs on the top row, trends in the middle, and drill‑downs at the bottom; decide required interactions. | Low‑fidelity mock‑up (Miro, Confluence canvas, Tableau) |
| **Internal QA & Peer Review** | – Run metric accuracy checks and cross‑filter sanity tests.  – Ask a non‑author teammate to interpret each view aloud—listen for confusion. | QA checklist signed |
| **Stakeholder Feedback** | – Share internally first; gather written feedback on relevance and usability.  – Iterate until remaining issues take < 5 minutes to explain. | Revised prototype |
| **External‑Ready Polish** | – Apply final formatting and accessibility passes.  – Lock the version and archive queries for traceability.  – Publish to Tableau Cloud or MicroStrategy with a change‑log. | Release notes & published URL |

**3 · Visual & Interaction Design [Check Mark = self-QA checklist requirement]**

**3.1 Layout & Hierarchy**

* **Follow the two‑ or three‑row pattern**—BANs across the top, the key trend in the centre, and supporting distributions or details below.
* Maintain generous white‑space gutters (≥ 16 px) to avoid visual crowding.

Source: [Dashboard Wireframe Kit 2nd Edition](https://www.kickstarter.com/projects/643038322/dashboard-wireframe-kit-2nd-edition)

**3.2 Key Numbers (BANs)**

* Check MarkPlace KPI boxes on the **top row of the screen**
* Pair each BAN with either (a) Δ vs target, (b) Δ vs prior period, or (c) a spark‑line; aim for a three‑second read.
* Detailed guides/examples: [Anatomy of the KPI Card](https://nastengraph.substack.com/p/anatomy-of-the-kpi-card)[In Praise of BANs (Big-Ass Numbers) - Data Revelations](https://www.datarevelations.com/bans/)

**3.3 Chart & Table Patterns**

* Match chart type to question: line → trend, bar → ranking, heat‑map → part‑to‑whole. [FT Visual Vocabulary](https://github.com/Financial-Times/chart-doctor/blob/main/visual-vocabulary/README.md)
* Check MarkPlace data labels directly on bar charts
* Check MarkFor combo charts, be thoughtful & deliberate with series shape. Eg quantity should be a bar, a % rate should be a line
* Detailed guides & examples:

[DataViz 101: Key Principles for Crafting Clear Dashboards](https://nastengraph.substack.com/p/dataviz-101-key-principles-for-crafting)|[Bar Charts Best Practices](https://nastengraph.substack.com/p/bar-charts-best-practices)|[Line Charts Best Practices](https://nastengraph.substack.com/p/line-charts-best-practices)

* Optional: create a **heat‑map legend into a filter** beside its chart; hide the default legend to reclaim space.
* Tables: use compact cell padding, banded rows, and collapsible subtotals.

**3.4 Numbers, Units & Axes**

* Apply number abbreviations for count/amount thousands (K), millions (M), and billions (B)
* Check MarkRemove redundant axis titles (e.g., remove date axis label “Date” ).

**3.5 Color & Typography**

* Set global font to Tableau/Arial 10 pt; section titles 14 pt bold; BAN digits 32 pt. (we should verify our standard)
* Use color thoughtfully, to aid viewer understanding. Some tips here: [DataViz 101: Key Principles for Crafting Clear Dashboards](https://nastengraph.substack.com/p/dataviz-101-key-principles-for-crafting)

**3.6 Interaction & Performance**

* Keep essential filters visible; hide chapter‑level filters that partner users will not see.
* Design at the final device size

**4 · Quality‑Gate Checklists [under construction]**

**A. Self-QA (ready for team QA)**

* Data labels on charts
* Descriptive titles
* KPIs sourced from dbt‑tested models; lineage captured.
* Layout follows the two‑/three‑row template; BANs Contextualized.
* Filters, tooltips, and actions tested; no dead links.
* Performance: initial load < 4 s; interaction latency < 1 s.

**B. Stakeholder / External Partner‑Ready – *Pixel Perfect***

* color palette meets brand and accessibility guidelines (contrast ≥ 4.5 : 1).
* Number formats match style guide;
* Tooltips Summarize the insight in one sentence; no raw SQL field names.
* Device preview validated on laptop, tablet, and phone layouts.
* Version and change‑log locked; stakeholder communications drafted.
* A second analyst signs off on data accuracy and visual QA.