BUSINESS INTELLIGENCE GUIDE

From Spreadsheets to Decisions

A practical guide to business dashboards that clarify the numbers, focus management attention, and support better operational decisions.

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THE PRINCIPLE

A useful dashboard does not simply display business performance. It gives a specific person enough trustworthy context to make a better decision.

01 Define
Choose the decisions first

02 Validate
Agree on the data and KPIs

03 Act
Test whether decisions improve

01 / START WITH THE DECISION

Build around actions, not charts

Organizations often have more reporting than insight. Finance, sales and operations may each maintain spreadsheets that describe the same activity differently. The problem is rarely the absence of a colorful chart. It is the absence of a shared answer to a practical business question.

Before selecting a BI platform, ask managers what they must decide each week. Choose only a few recurring decisions, then work backward to the information they need.

A THREE-DECISION BRIEF

1 **Staffing**
Where will next week's workload exceed available capacity?

2 **Sales follow-up**
Which qualified opportunities need attention today?

3 **Reordering**
What stock may run short before the next delivery?

Define each KPI as a contract

Every key performance indicator should have an agreed definition before it appears on a dashboard. The essential fields are the metric name, calculation, reporting window, accountable data owner and decision it supports. The source system and refresh schedule complete the operational definition.

KPI field	Example: won-deal conversion
Calculation	Won opportunities / all opportunities closed in the period
Time window	Calendar month, based on close date
Owner and source	Sales operations; CRM opportunity history
Decision supported	Review qualification and follow-up effectiveness
Freshness / caveat	Daily refresh; report counts and segment mix alongside %

WHY THE DEFINITION MATTERS

A conversion rate calculated from **leads created** is not interchangeable with one calculated from **opportunities closed**. Without a common denominator, two accurate spreadsheets can still tell conflicting stories.

02 / VERIFY THE INPUTS

A polished chart can still be wrong

The most common dashboard errors begin before visualization. One team measures issued invoices; another measures payments received. A late adjustment appears in next month's file; duplicate customer records inflate counts. These are definitional and data-governance problems, not chart-design problems.

Illustrative scenario: one invoice cohort

A hypothetical business issues CAD 120,000 of invoices in March. Within 30 days of each invoice date, CAD 96,000 has been collected against those same invoices. The remaining CAD 24,000 is unpaid *at that 30-day checkpoint*. All figures below are synthetic.

INVOICED	COLLECTED	UNPAID
CAD 120K	**CAD 96K**	**CAD 24K**
March invoice cohort	Within 30 days	At the 30-day checkpoint

Within-30-day collection rate **80%**

Metric definitions for this example

Metric	Precise meaning
Invoiced amount	Value of invoices with issue dates in March
30-day collections	Payments applied to those March invoices within 30 days of issue
Unpaid at day 30	March invoice amount less the qualifying 30-day collections
Collection rate	30-day collections / March invoiced amount = 80%

IMPORTANT DISTINCTION

This is **not** a statement of total March cash receipts or total accounts receivable. Those require different populations, dates and definitions. The dashboard should say exactly which question its numbers answer.

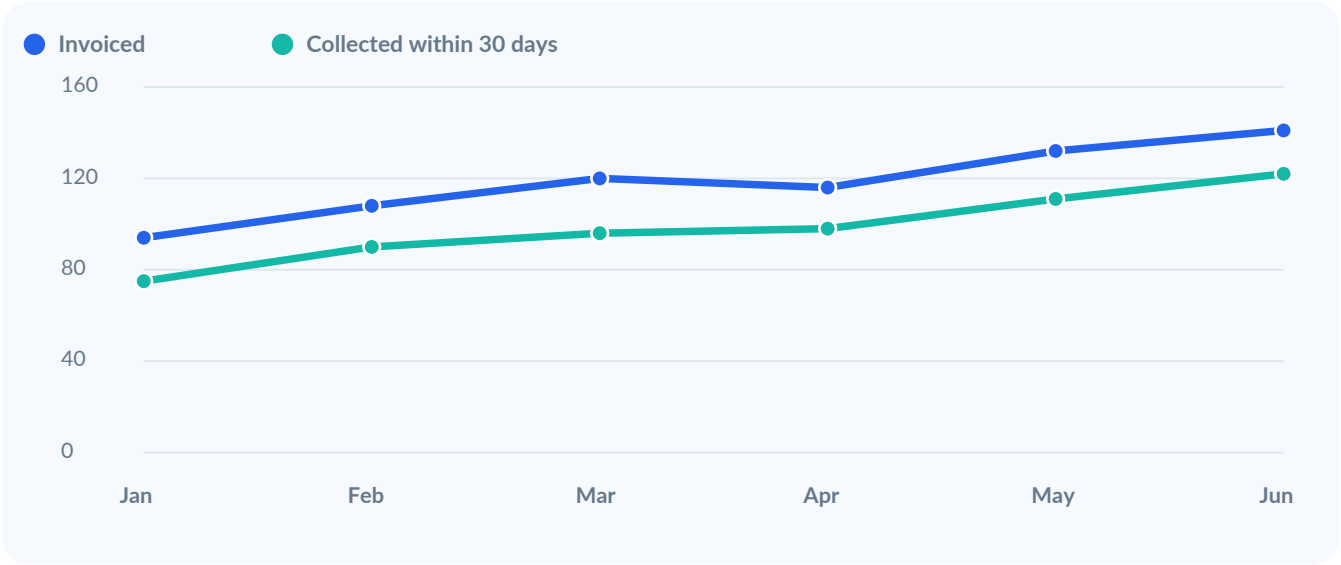
03 / MAKE PATTERNS ACTIONABLE

Choose charts that answer questions

Use a line chart to compare a consistent metric over time, bars to compare categories, and a table when exact operational details matter more than visual shape. Label units and denominators; display the last refresh time; use color for exceptions rather than decoration.

Example dashboard: invoices and 30-day collections

Synthetic CAD thousands by invoice month · same 30-day measurement window



What this suggests: the value collected within 30 days rises across the six synthetic cohorts, but some invoices remain unpaid at the checkpoint. A manager might segment these balances by customer, aging and payment terms before adjusting collection workflows. The chart alone does not prove why the pattern changed.

What to show beside the visualization

Trend	Add prior-period comparison and explain any seasonality.
Exception	Highlight movements that cross an agreed business threshold.
Definition	Show calculation, unit, population and refresh timestamp.
Action	Name the owner and the specific follow-up the metric supports.

04 / PILOT BEFORE YOU SCALE

A small dashboard with a real job

A first release should be narrow enough to test with the people who will actually use it. Start with one business function and three to six stable measures. Give users the ability to question an unexpected number and trace it back to its source.

A practical five-stage rollout

1. **Frame the decision**
   Identify the manager, frequency, business action and success measure.

2. **Audit the sources**
   Reconcile identifiers, duplicates, late entries and refresh schedules.

3. **Build a lean prototype**
   Show a few KPIs, relevant comparisons and drill-down details.

4. **Observe actual use**
   Ask which decision changed, who acted and what was learned.

5. **Govern and expand**
   Document ownership, permissions and metric changes before scaling.

Example pilot: the weekly collections review

Instead of asking the finance team to maintain multiple copies of the same spreadsheet, a small dashboard could display invoice cohorts, the share collected within 30 days, overdue balances by customer and the dates of the latest updates. The team can then assign follow-up and record what action was taken.

MEASURE WHETHER THE PILOT HELPS

Track the time spent reconciling reports, the number of definition disputes, whether follow-ups happen on schedule, and the usefulness of the answers at the decision meeting. Better presentation is not enough; the pilot should improve the decision process.

05 / MAKE IT TRUSTWORTHY

A dashboard readiness checklist

Use this checklist before approving any dashboard for ongoing management use. A dashboard becomes a dependable business tool only when the numbers are defined, data limitations are visible and someone owns the decisions it supports.

- [ ] **Define three decisions**
  Identify the person, cadence and action for each decision.
- [ ] **Inventory source systems**
  List spreadsheets, finance tools, CRM and operational systems.
- [ ] **Agree on KPI definitions**
  Document the population, formula, denominator and time window.
- [ ] **Test data quality**
  Review duplicates, missing values and inconsistent identifiers.
- [ ] **Prototype simply**
  Start with a clear trend, comparison and supporting detail.
- [ ] **Set refresh and access**
  Define when data updates and who can see sensitive information.
- [ ] **Pilot with real users**
  Observe decisions and record unresolved questions.
- [ ] **Assign long-term owners**
  Maintain the dictionary, checks and change history.

THE NORTHSTAT APPROACH

We help organizations turn fragmented reporting into usable business intelligence: clarifying questions, validating data, agreeing on metrics and building dashboards that support everyday decisions. The starting point is not a tool purchase - it is a decision worth improving.

Ready to make your business reporting more useful?

Explore Northstat AI Solutions' Business Intelligence and Data Analytics services or discuss a focused dashboard pilot.
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Note: All numerical examples in this guide are synthetic and illustrative. They are not results from a Northstat client engagement. Figures describe invoice cohorts at consistent checkpoints and should not be interpreted as total cash flow or full accounts receivable.