

EFFECTIVE DASHBOARD DESIGN: STRATEGIES & TACTICS

Brent Dykes | Director, Data Strategy

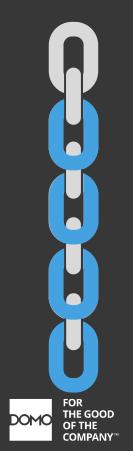




HOW DOES THIS HAPPEN?



WHAT INFORMS DATA VISUALISATION?







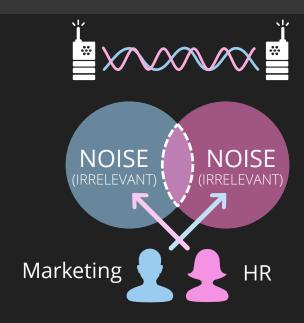








AUDIENCE: HOW TO GET A CLEAR SIGNAL

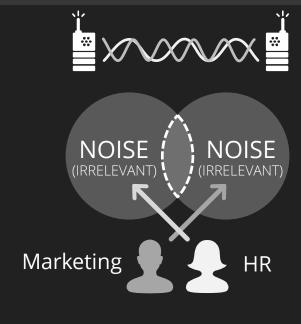


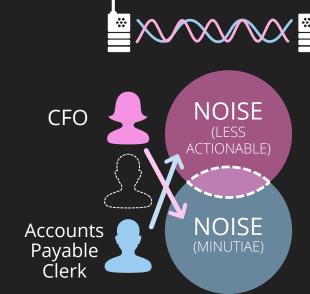
AUDIENCE

DIVERGENT AREAS OF FOCUS



AUDIENCE: HOW TO GET A CLEAR SIGNAL





AUDIENCE

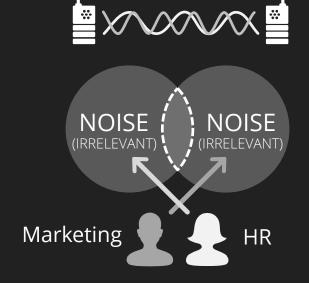
DIVERGENT AREAS OF FOCUS



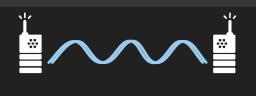
AUDIENCE

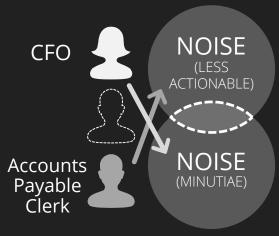
DIFFERENT LEVELS

AUDIENCE: HOW TO GET A CLEAR SIGNAL











AUDIENCE

DIVERGENT AREAS OF FOCUS



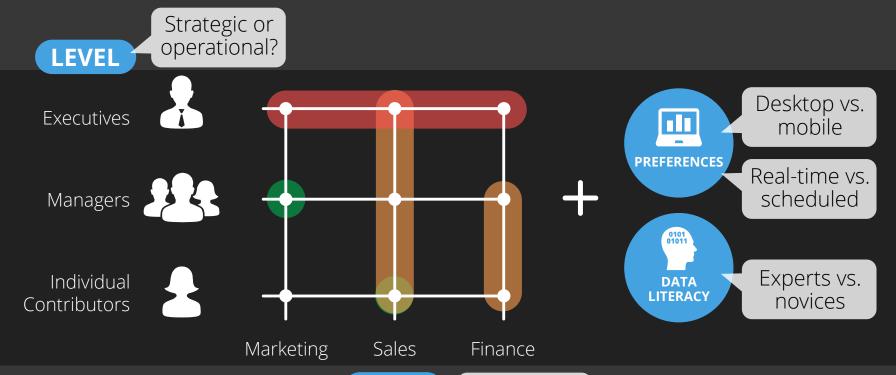
AUDIENCE

DIFFERENT LEVELS

AUDIENCE

SHARED FOCUS + SIMILAR LEVEL

DEFINE YOUR AUDIENCE & THEIR SHARED NEEDS







WHAT ARE THEIR BURNING QUESTIONS?



INVERTED PYRAMID FRAMEWORK

INVERTED PYRAMID

MOST IMPORTANT INFORMATION

SUPPORTING INFORMATION

OTHER DETAILS



THE BOY WHO CAME BACK TO LIFE

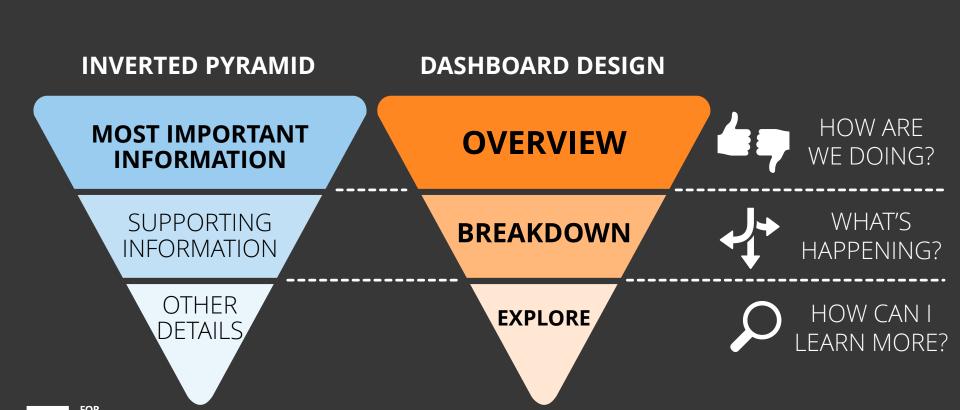
The former missing child Will Byers has been found after a week of searching. He is presently in stable condition in Hawkins General Hospital. Byers' mother, Joyce Byers, alleges that Will was the subject of a secret government program run by the Hawkins National Laboratory. The allegation comes amidst a massive investigation into the hidden organization and its elaborate experimentation in perusal of mind control.

The abuse detailed in the first report includes prolonged physical duress and psychological interrogation. This government sanctioned torture has provoked outrage amongst the American people. In a statement issued yesterday morning, Ives mentioned her "disgust" with the organization saying "our own American people are being treated like the enemy... we should be directing our attention to the real target, the Soviets, not our own daughters and sons." Under legal advice, Brenner has issued no comment on...



Twelve-year-old Will Byers was reported missing on Nov. 3, and it was falsely reported that his body was recovered at Sattler Quarry.

INVERTED APPROACH TO DASHBOARD DESIGN



THE GOOD OF THE COMPANY™

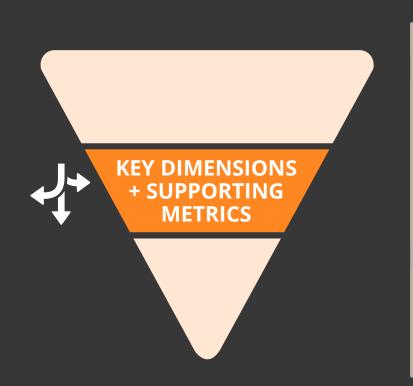
OVERVIEW: HOW ARE WE DOING?

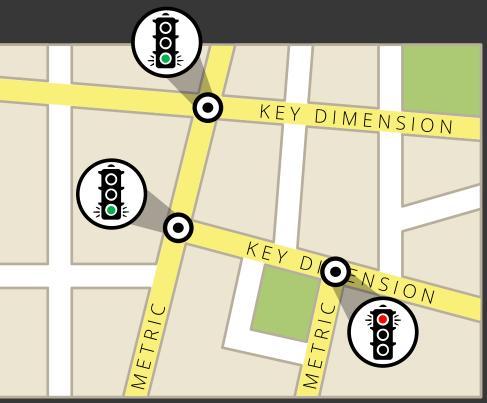




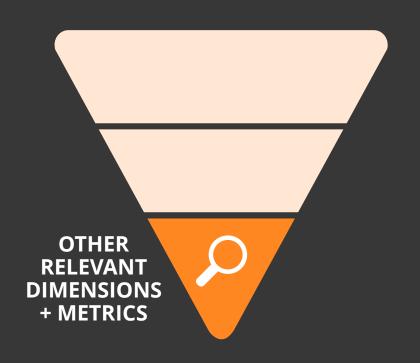


BREAKDOWN: WHAT'S HAPPENING?



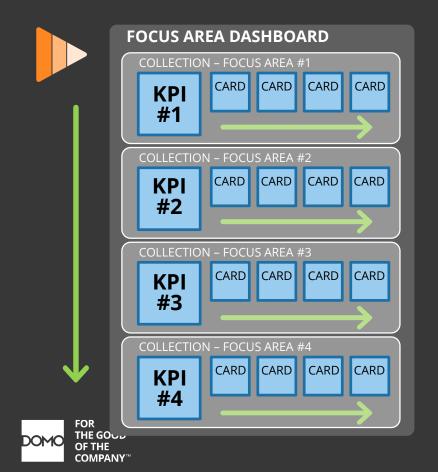


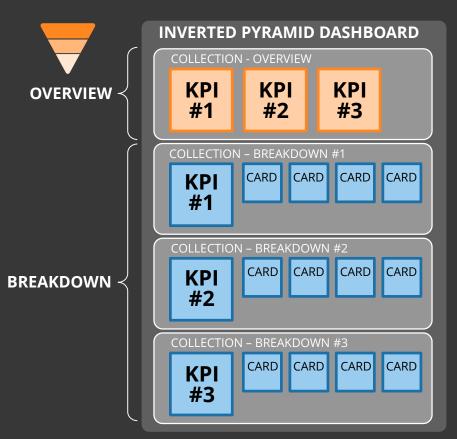
EXPLORE: HOW CAN I LEARN MORE?





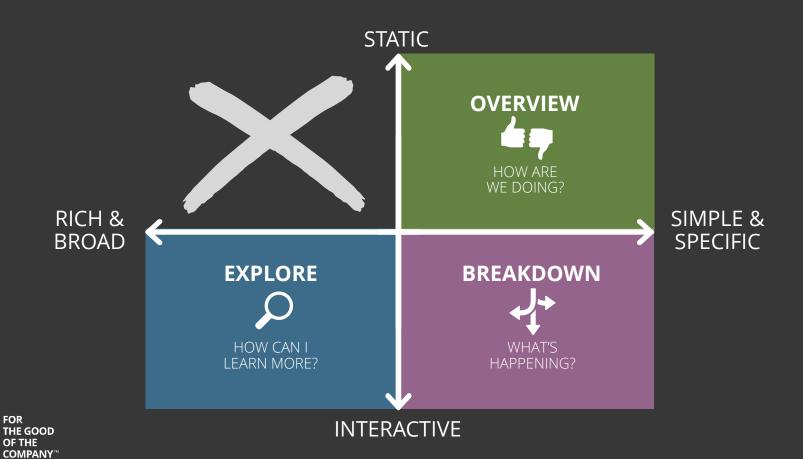
HOW TO DESIGN YOUR DASHBOARD





VISUALISING DATA EFFECTIVELY

VISUALISATION STRATEGY BY DASHBOARD SECTION



THE RIGHT CHART TYPE FOR YOUR DATA

Distribution

Histogram

Box plot

Choropleth



NOT ALL CHARTS ARE CREATED EQUAL











Relationship



Distribution



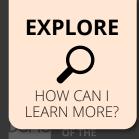






















OVERVIEW: WHAT CAN YOU SEE AT A GLANCE?



WHAT'S ESSENTIAL FOR THE OVERVIEW CARDS?

















POLARITY



VARIANCE



ANOMALIES

- → Count
- → Sum
- → Ratio

- → Historical performance (P-o-P)
- → Statistical benchmarks
- → Targets
- → Pace (to target)
- → Peer / industry benchmarks

- → Positive
- → Negative
- → Neutral

- → No change
- → Slight change
- → Significant change

- → Potential alerts
- → Actionable reminders



THREE KEY TYPES OF OVERVIEW CARDS

BAR CHARTS





LINE CHARTS



GAUGES











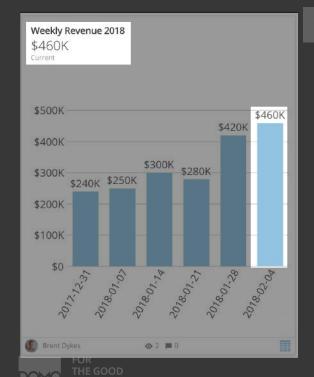


KEY RESULTS

CONTEXT

POLARITY















KEY RESULTS

CONTEXT

T POLARITY

VARIANCE



1. Bar









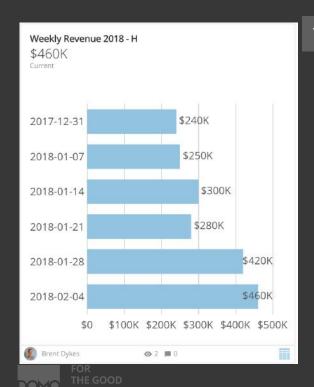


KEY RESULTS

CONTEXT

POLARITY

VARIANCE



1. Bar







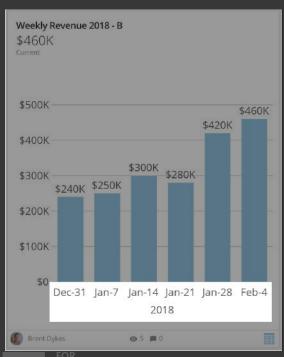


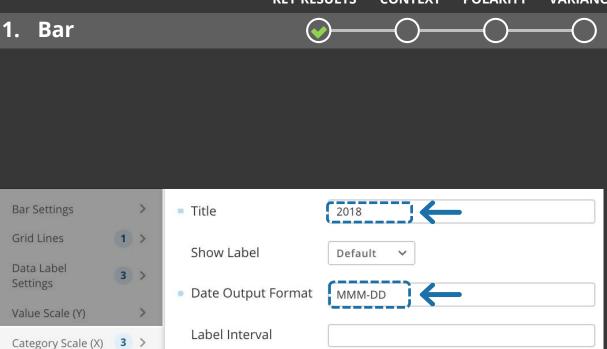


KEY RESULTS

CONTEXT

POLARITY











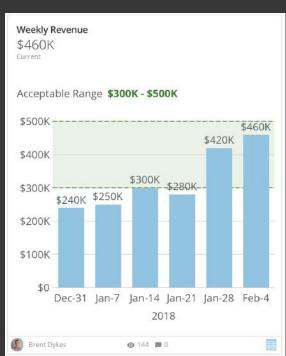




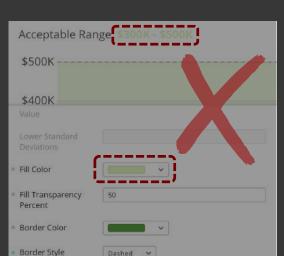
KEY RESULTS

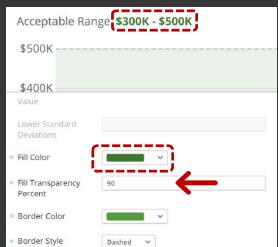
CONTEXT

POLARITY





















KEY RESULTS

CONTEXT

POLARITY



















KEY RESULTS

CONTEXT

POLARITY





















KEY RESULTS

CONTEXT

POLARITY

VARIANCE



1. Bar









\$500K









KEY RESULTS

CONTEXT

POLARITY

VARIANCE







Weekly Revenue - Y-o-Y Comparison 2

\$460K Current

30%









KEY RESULTS

CONTEXT

POLARITY









3/5 NOVELTY







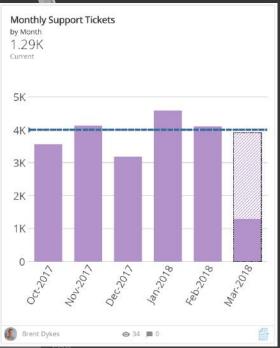


KEY RESULTS

CONTEXT

POLARITY

VARIANCE



1. Bar

Scale Marker

Last Value

Projection

Regression Line

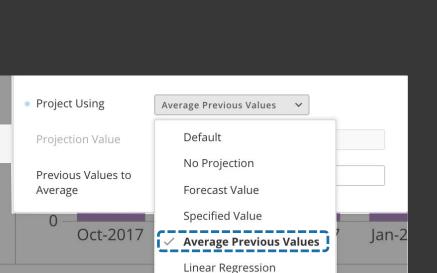
Full Size Settings

Reset All Chart Properties

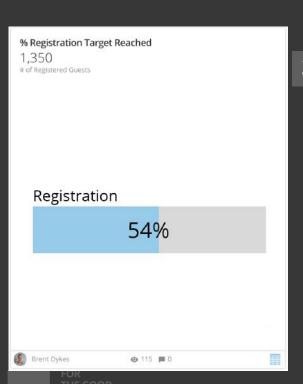
6 >

1 >

1 >















KEY RESULTS

CONTEXT

POLARITY

VARIANCE

. Bar

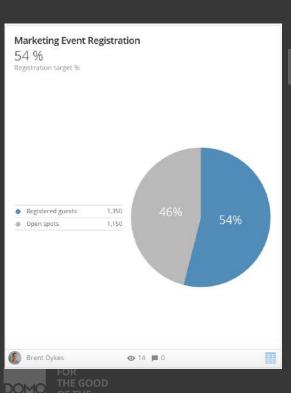
2. Progress bar



















KEY RESULTS

CONTEXT

POLARITY

VARIANCE



2. Progress bar





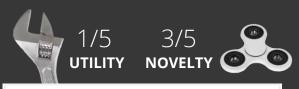




















KEY RESULTS

CONTEXT

POLARITY

VARIANCE

% Registration Target Reached

1,350

of Registered Guests

Bar

2. Progress bar









Registration

54%







Bar

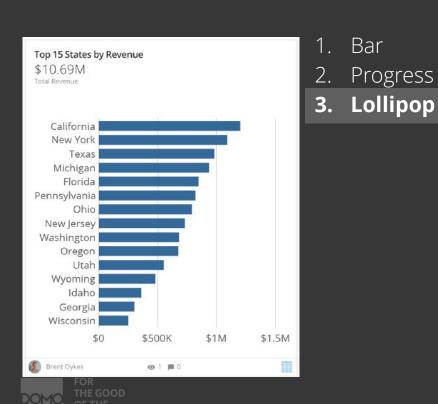
Progress bar





Bar

Progress bar



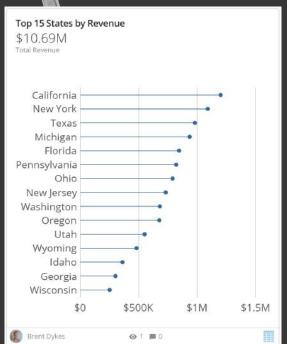


Bar

3. Lollipop

Progress bar











KEY RESULTS

CONTEXT

POLARITY

VARIANCE















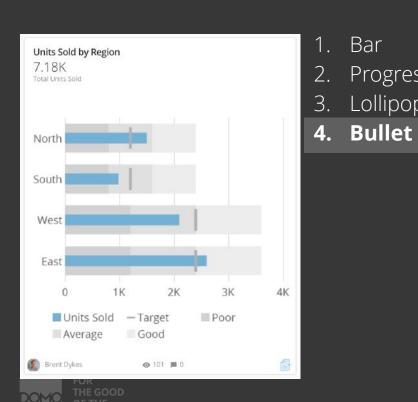




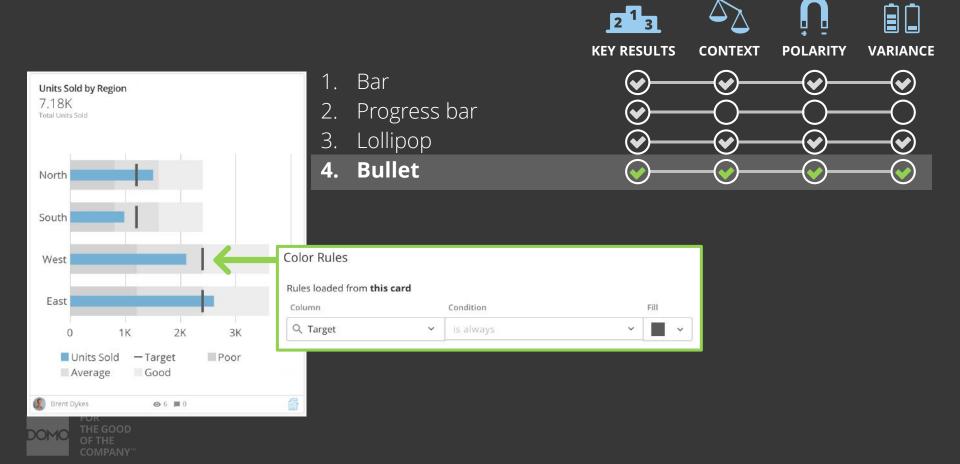
Bar

Progress bar

Lollipop



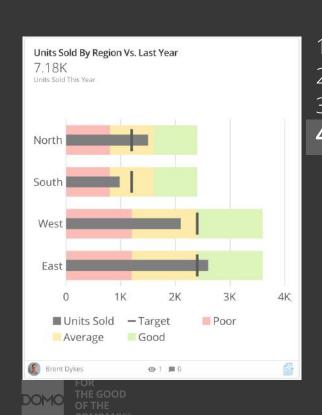


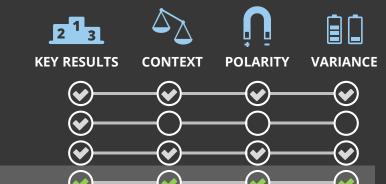


Bar

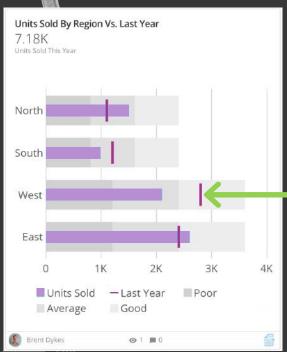
Progress bar

Lollipop

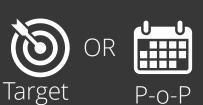








- 1. Bar
- 2. Progress bar
- 3. Lollipop
- 4. Bullet

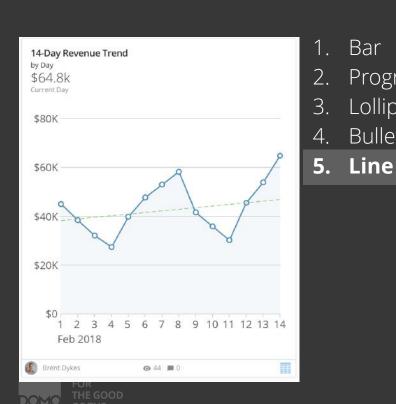


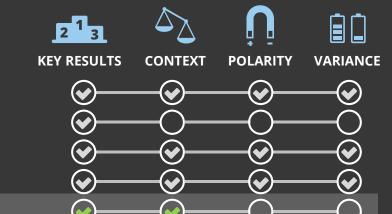


Bar

Progress bar

Lollipop

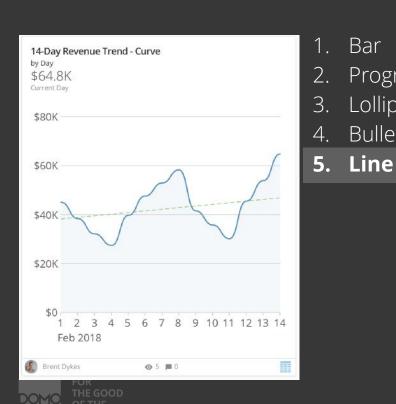


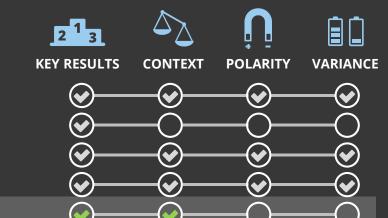


Bar

Progress bar

Lollipop



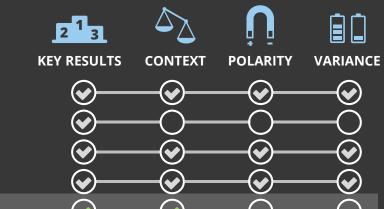


Bar

Progress bar

Lollipop



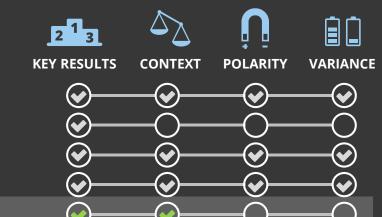


Bar

Progress bar

Lollipop



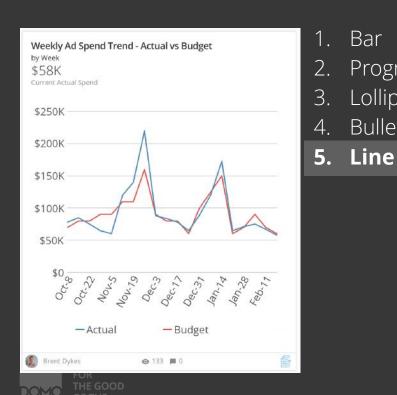


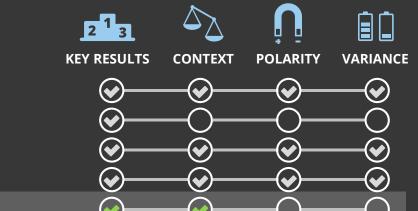


Bar

Progress bar

Lollipop





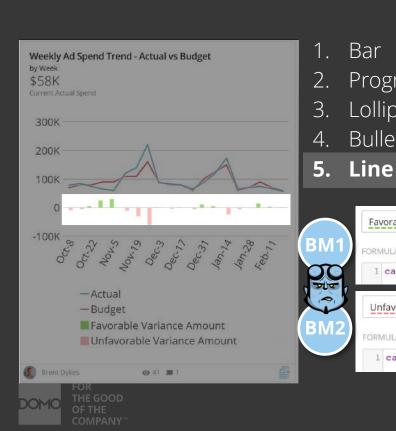
Bar

Progress bar

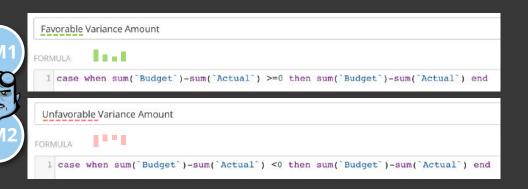
Lollipop







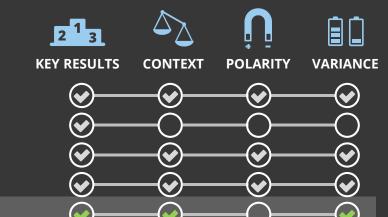




Bar

Lollipop





Bar

Progress bar

Lollipop





Bar

Lollipop





Bar

Progress bar

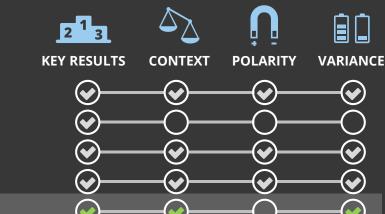
Lollipop

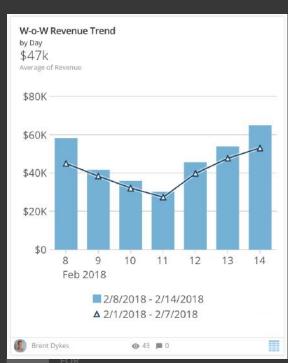
Bullet

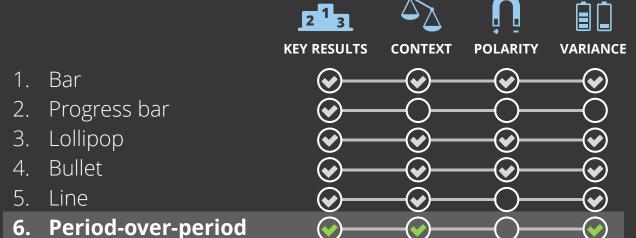
5. Line



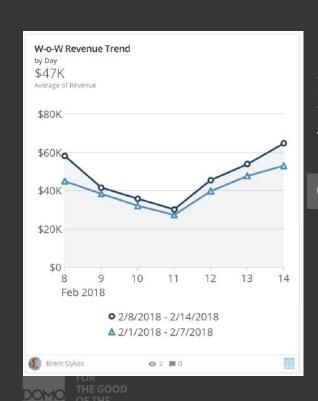


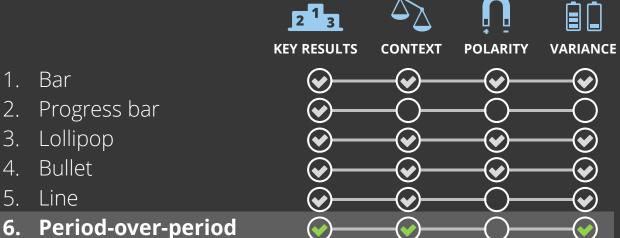


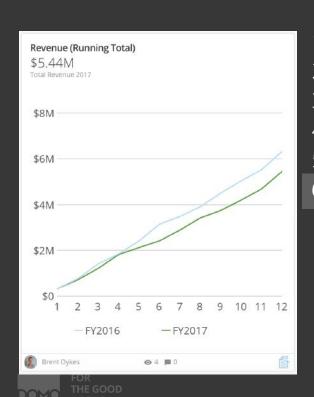


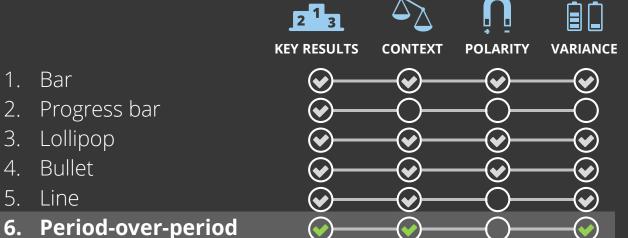




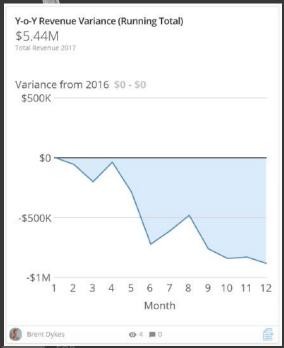










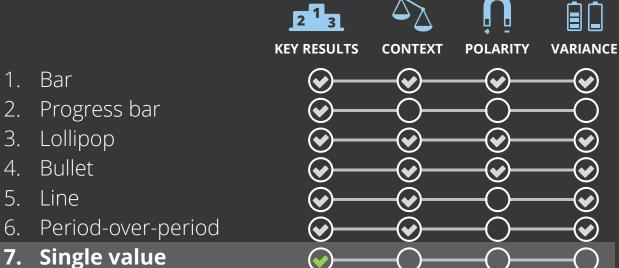




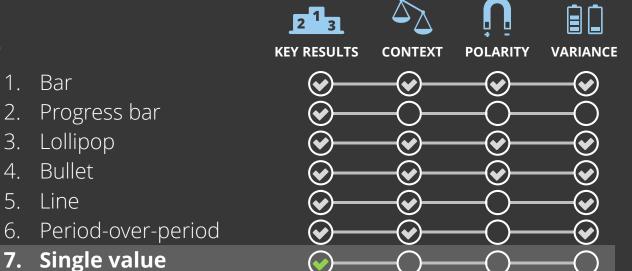
6. Period-over-period







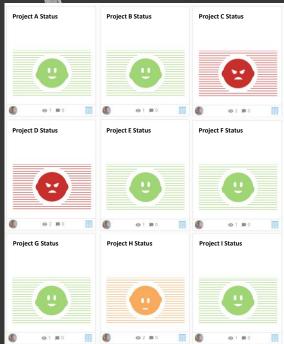




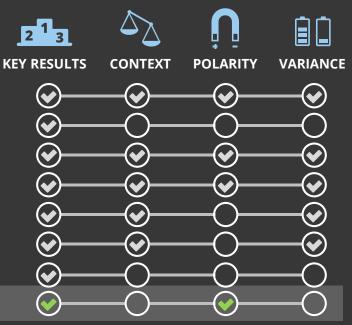






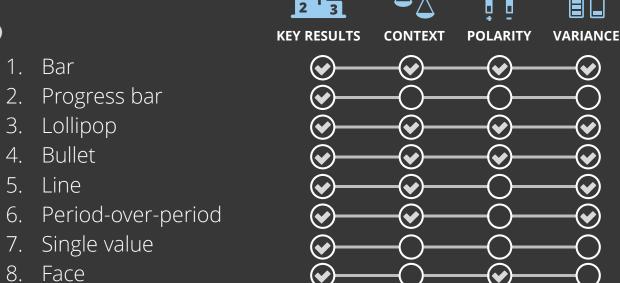


- 1. Bar
- 2. Progress bar
- 3. Lollipop
- 4. Bullet
- 5. Line
- 6. Period-over-period
- 7. Single value
- 8. Face



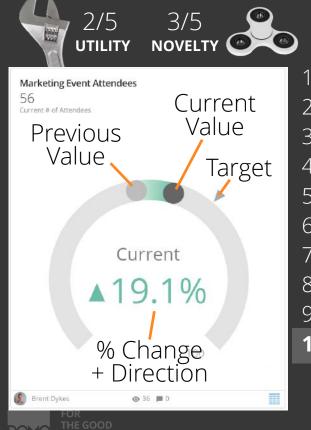


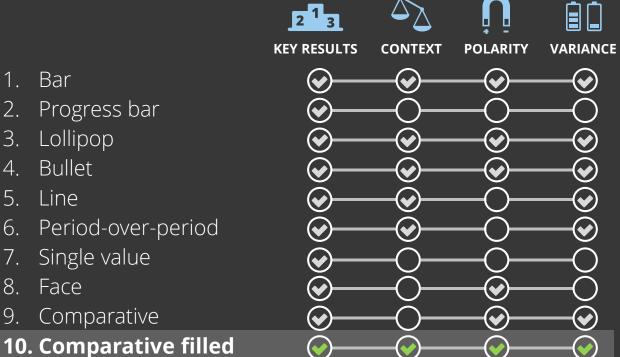


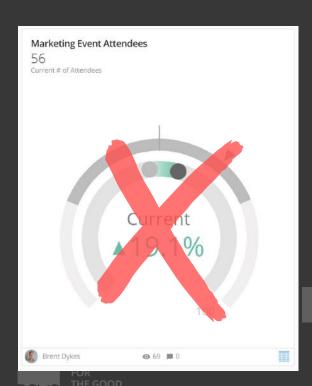


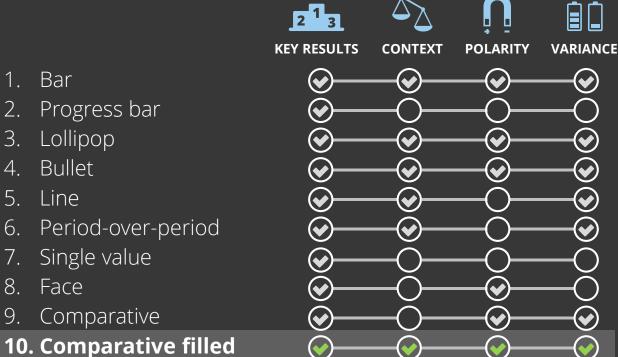
9. Comparative



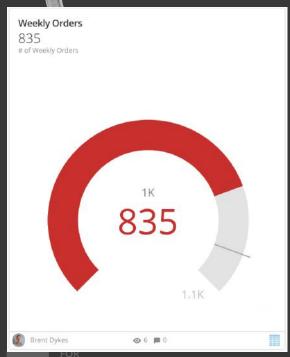






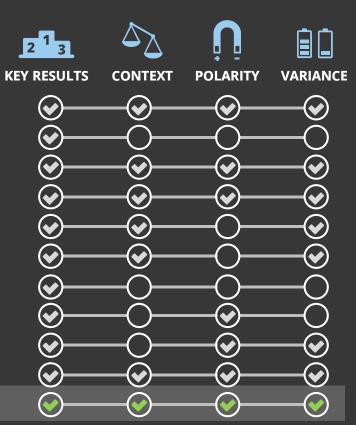




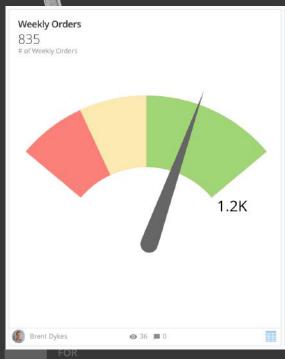


- 1. Bar
- 2. Progress bar
- 3. Lollipop
- 4. Bullet
- 5. Line
- 6. Period-over-period
- 7. Single value
- 8. Face
- 9. Comparative
- 10. Comparative filled

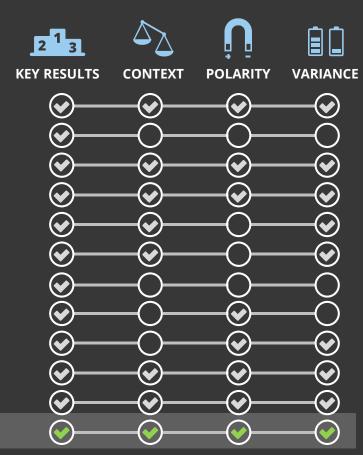
11. Filled





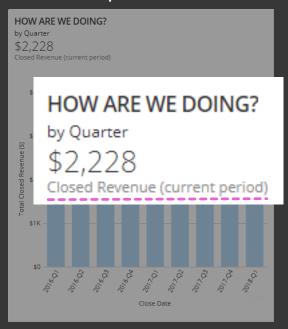


- 1. Bar
- 2. Progress bar
- 3. Lollipop
- 4. Bullet
- 5. Line
- 6. Period-over-period
- 7. Single value
- 8. Face
- 9. Comparative
- 10. Comparative filled
- 11. Filled
- 12. Radial

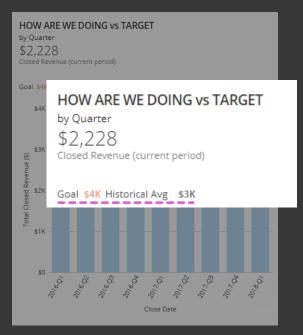


OVERVIEW: OPTIMISING YOUR SUMMARY NUMBERS

1. Descriptive labels



2. Goals & scale markers



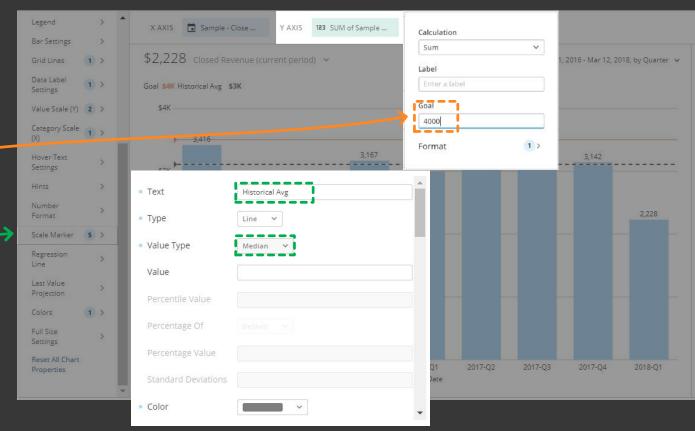


OVERVIEW: OPTIMISING YOUR SUMMARY NUMBERS



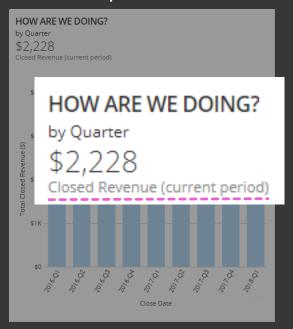
FOR

THE GOOD OF THE COMPANY™



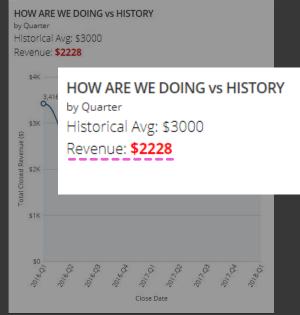
OVERVIEW: OPTIMISING YOUR SUMMARY NUMBERS

1. Descriptive labels



2. Goals & scale markers 3. Customized







OVERVIEW: OPTIMISING YOUR SUMMARY NUMBERS

HOW ARE WE DOING vs HISTORY

by Quarter

Historical Avg: \$3000

Revenue: **\$2228**



CONCATENATE



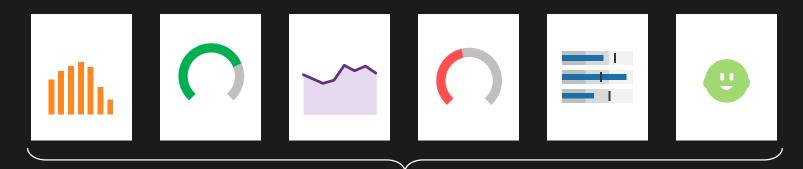
HTML

CASE Statement



```
CONCAT(
 '<div style="color:black;font-size:medium;">
      <div>
           Historical Avg: $3000
      <div/>'
   '<div style="color:black;font-size:medium;">
      <div>
           Revenue:
, CASE
    WHEN
       count (
         case
           when MONTH('Sample - Close Date') in('02','03','04')
             and YEAR('Sample - Close Date') = 2018
           then 'Sample - Revenue'
         end) >= 3000
     THEN '<span style="color:green">'
    ELSE '<span style="color:red">'
 ,'<b>','$', sum(case
           when MONTH('Sample - Close Date') in('02','03','04')
           then 'Sample - Revenue'
,'</b>', '</span> <div/>')
```

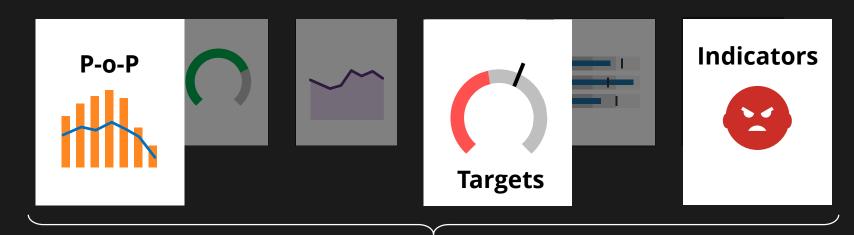
#1 - Keep the cards simple



Clean, intuitive visuals



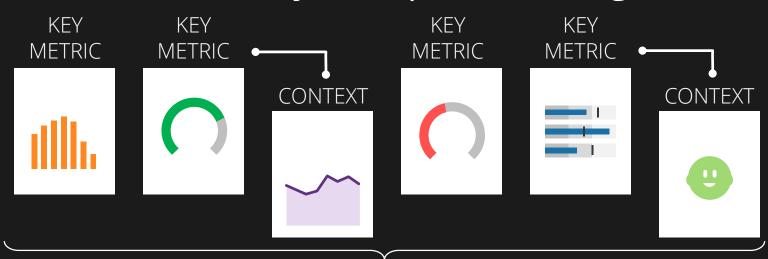
#2 - Build the cards to inspire action



Context, polarity, & variance



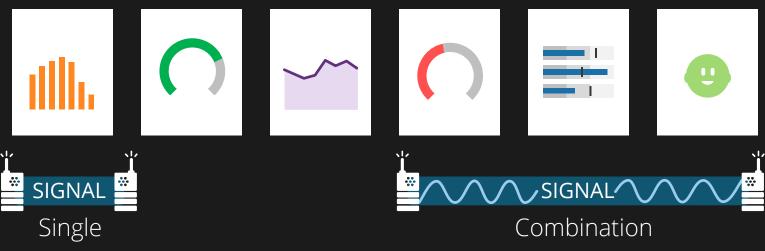
#3 - Ensure every card pulls its weight



Either show results or provide context



#4 - Signal can come from a single card or a combination of cards

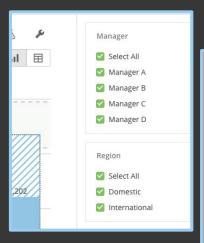






BREAKDOWN OPTIONS IN DOMO

Filters



Drill paths



Collections



Related cards

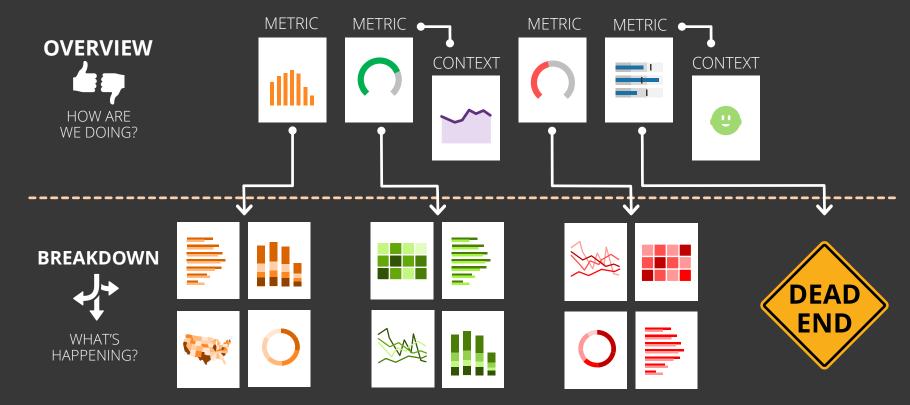


Hover text



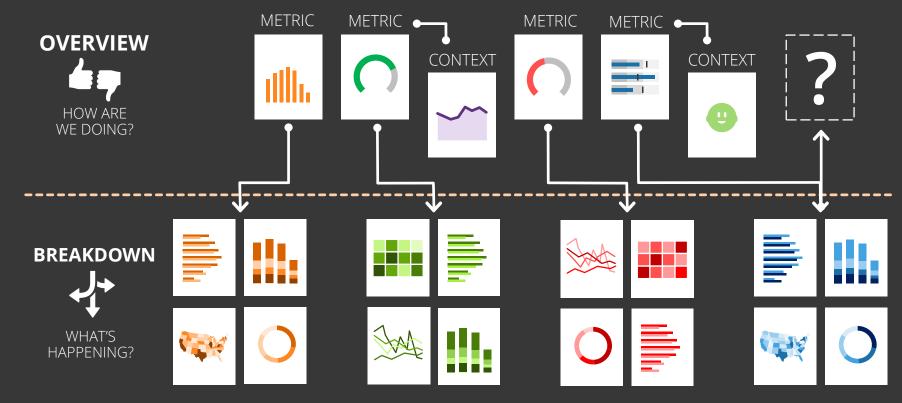


BREAKDOWN: EVERYTHING IS CONNECTED



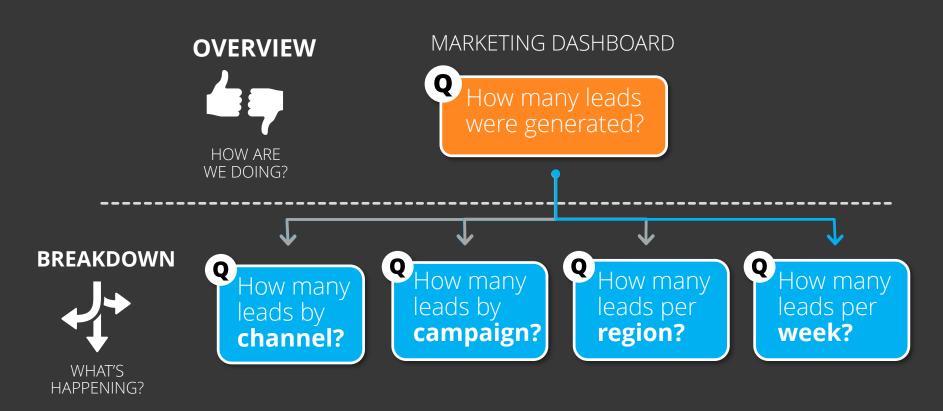


BREAKDOWN: EVERYTHING IS CONNECTED





BREAKDOWN: ANTICIPATING THE NEXT QUESTION(S)



FOR THE GOOD OF THE COMPANY™

4 COMMON TYPES OF DIMENSIONAL BREAKDOWNS



TIME

- → Hourly
- → Daily
- → Weekly
- → Monthly
- → Annually



PEOPLE

- → Customer types
- → Segments
- → Roles / positions
- → Groups / teams
- → Demographics



PLACES

- → Countries
- → Regions
- → States
- → Cities
- → Stores

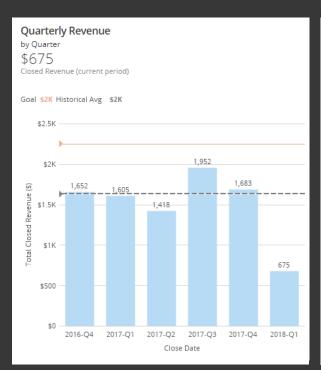


THINGS

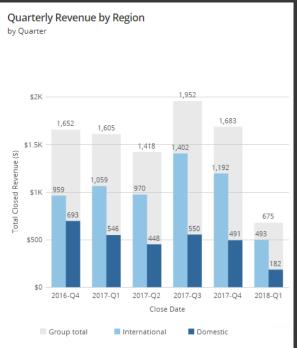
- → Products
- → Categories
- → Services
- → Process stages
- → Industries



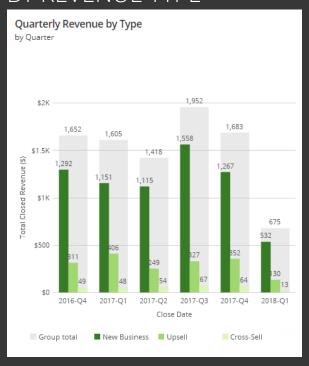
BREAKDOWN: TYPICAL EXAMPLES



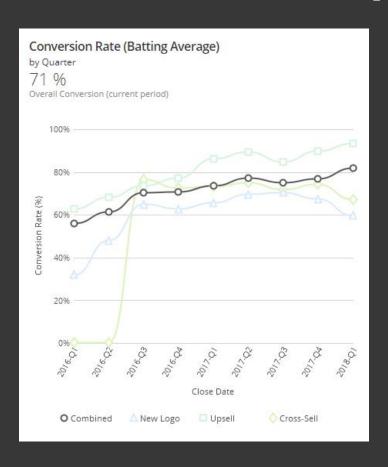
BY REGION



BY REVENUE TYPE



BREAKDOWN: SUBTLE CONTEXT TECHNIQUE





METRICS: LEADING VS. LAGGING INDICATORS

LEADING





Measure the **inputs** of your key business processes



Measure the **outputs** of your key business processes

Help predict **future** performance



Show **past** results

Easier to influence but harder to measure



Easier to measure but difficult to influence



LEADING AND LAGGING INDICATOR EXAMPLES

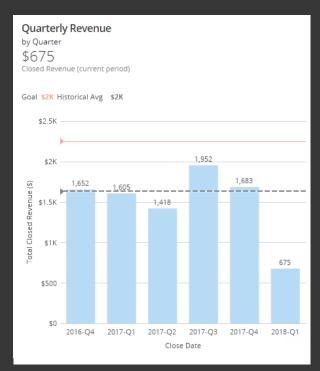


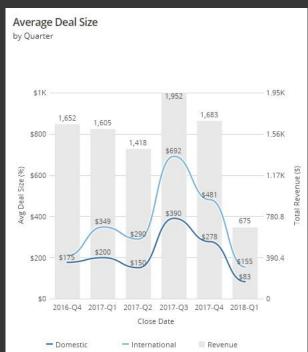


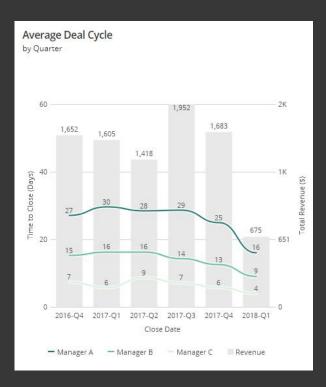
Focus Area	Leading Indicator	Lagging Indicator
Sales	Qualified opportunities ——	Closed deals
Marketing	Click-throughs	Leads
Human Resources	Employee sentiment	Employee turnover
Manufacturing	On-time delivery ———	Customer satisfaction
Customer Service	Customer satisfaction	Customer churn



BREAKDOWN: LEADING AND LAGGING INDICATOR CARDS







GOOD DASHBOARD DESIGN IS IMPACTFUL

DASHBOARD DESIGN

FOR THE GOOD OF THE COMPANY™



QUESTIONS?

