

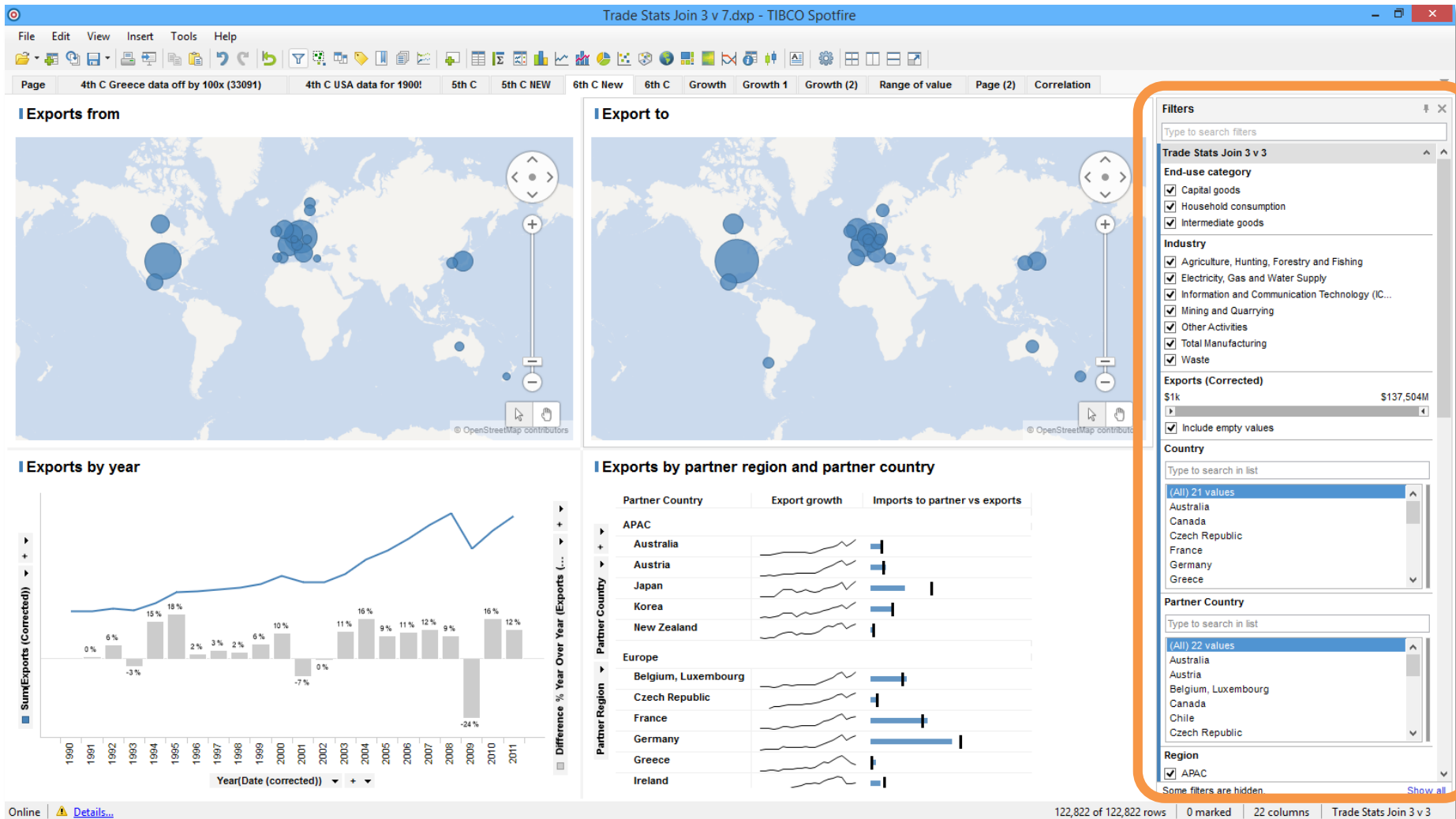
Beyond Dashboards: Designing Dashboards That Users Actually Like

Nick Desbarats
Independent Educator and Consultant
Practical Reporting, Inc.

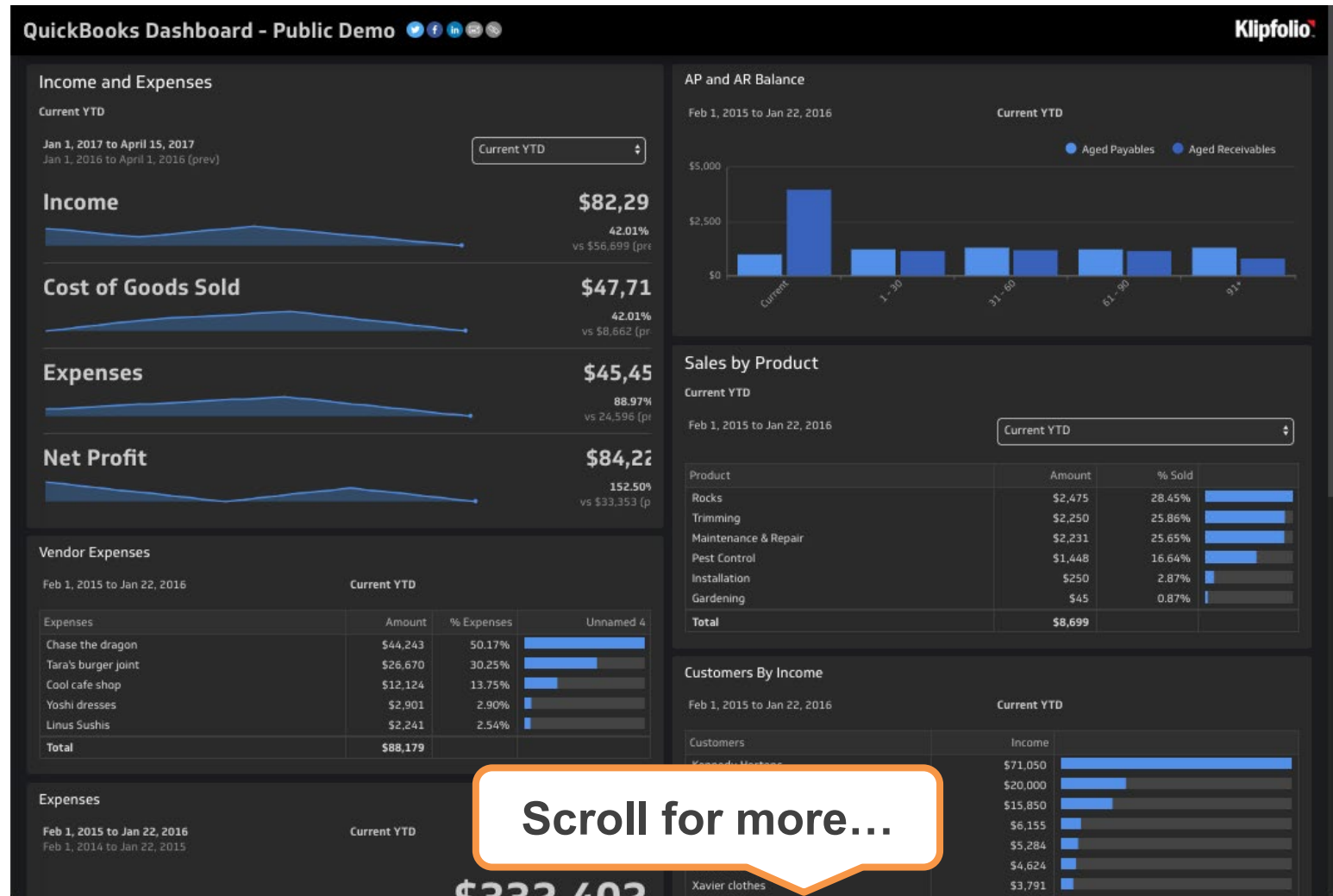
nick@practicalreporting.com



Is it OK to put filters on a dashboard?



Does everything need to fit on one screen?



Should dashboards have...

An eye-catching visual design?



Quarterly Dashboard to 30 June 2019: CAPACITY BUILDING

REACH

Investment readiness grants for charities & social enterprises via social investor 'Access Points'

376
Grants awarded to date

£5.3m
Grants awarded to date

£14k
Average Grant size

£922k
Grants awarded this quarter

29
Social Investor 'Access Points'



For more information see reachfund.org.uk

Enterprise Development Programme

Helping charities and social enterprises transition to new enterprise models or grow existing ones.

78
Feasibility Grants awarded to date
33 Homeless **45** Youth

24
Development Grants awarded to date
10 Homeless **14** Youth

£7.6k
Average feasibility grant size

£34.8k
Average development grant size

40 Enterprise Learning places awarded
20 Homeless **20** Youth



[CLICK HERE to view interactive map](#)

For more information see silgroup.org.uk/enterprise-development-programme

Connect Fund

Building a better social investment market

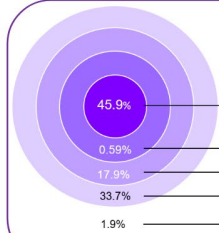


In an evaluation conducted of Connect Fund grantees, **79%** of them "agree that there is more support available for VCSEs considering social investment than 18 months ago"

[CLICK HERE to view interactive map](#)

OUR ENDOWMENT

Invested under our 'total impact' approach whilst being spent down to fund these programmes



Portfolio investments at 30th June 2019

Or a subdued one?

Google Analytics Daily Overview

How many people have visited my site today?

<https://www.skynet.com>

4,313
Users Today

vs. an avg of 4,029 (Last 30 Days)

4,318
Expected Users

How many goals have been completed today?

<https://www.skynet.com>

65 ★
Goals Today

Goals: All

58
Expected Goals

vs. an avg of 53 (Last 30 Days)

Where is my traffic coming from today?

<https://www.skynet.com>

Channel	Sessions	% of Traffic	Goal Conv. Rate	Goals Completions
Direct	3,397 ★	65.9%	2.61% ★	54
Email	808	15.7%	1.9%	15
Organic Search	430	8.3%	0.2% ★	1
Paid Search	194 ★	3.8%	2.6%	5
Referral	108	2.1%	0.0%	0
Social	84	1.6%	2.4%	15
Display	83	1.6%	8.4%	7
(Other)	50	1.0%	6.0%	3

Which sites are sending me traffic?

<https://www.skynet.com>

Referrer	Sessions	Bounce Rate	Goal Completions
facebook.com	18	35.0%	3
yahoo.au	12	72.2%	2
lifehack.com	5	31.2%	0
en.wikipedia.org	3	81.1%	1
images.google.au	3	27.5%	1
linkedin.com	3	44.3%	0

How is my website performing today?

<https://www.skynet.com>

Sessions

7,833 ★
vs 7,032 expected

Bounce Rate

67.0%
vs 66.0% expected

Avg Pageviews

1.4
vs 1.8 expected

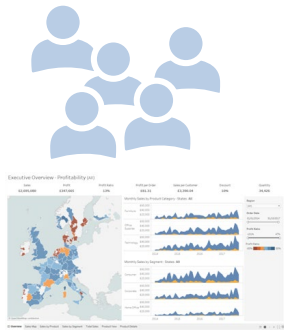
Avg Session Duration

1m:32s
vs 1m55s expected



Should dashboards serve...

One role?



Or several roles?



What's the ultimate purpose of a dashboard?

- Tell a story
- Answer a question
- Support decision-making
- Prompt the user to take action
- Generate interest in the data
- Monitor current conditions
- Improve organizational performance

What the heck is a “dashboard”,
anyway?

What *isn't* a dashboard?

“Dashboard”

Most common understanding:

“A display with a bunch of charts on it”

Umbrella term for:

“Document”

Most common understanding:

“Page(s) with words/images on them”

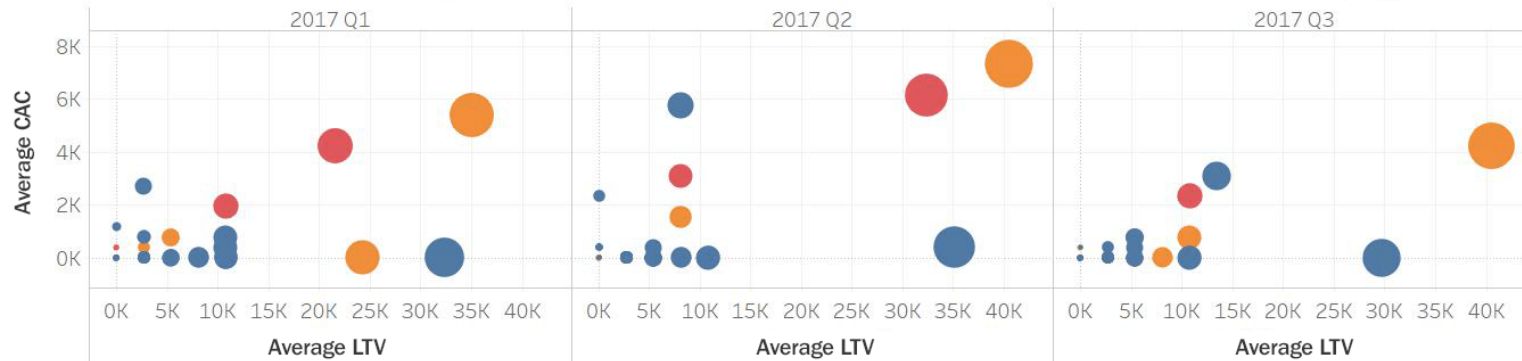
Umbrella term for:

- Patent applications
- Movie screenplays
- News articles
- Etc.

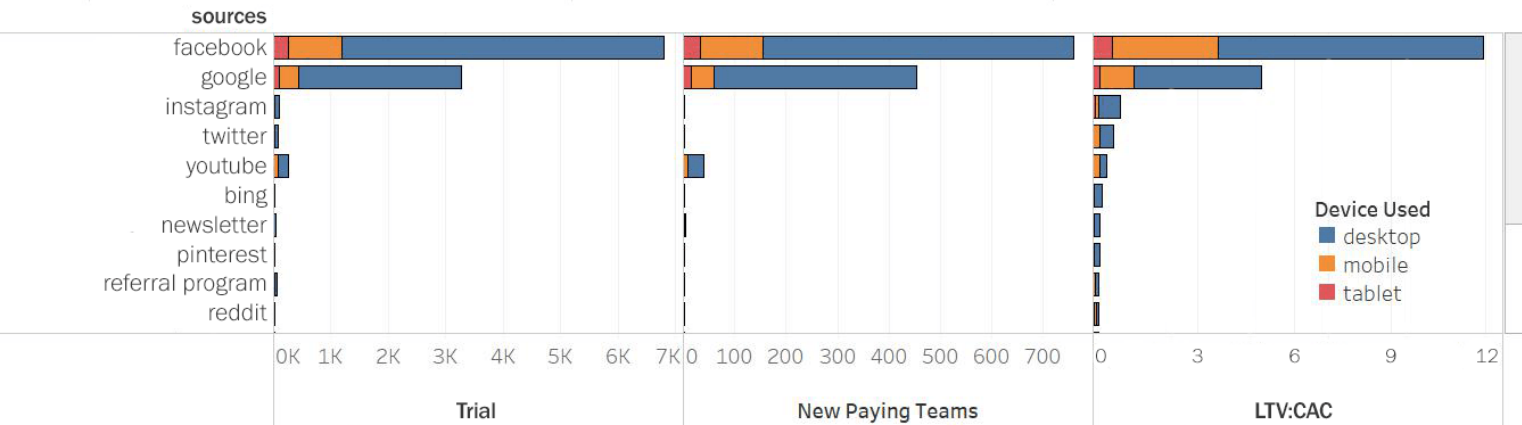
~~“Document-writing best practices”?~~

- Best practices for writing patents
- Best practices for writing screenplays
- Best practices for writing new articles

Return on Ad Spend by Segment



- browser**
- ☐ (All)
 - ☒ safari
 - ☒ mobile safari
 - ☐ firefox
 - ☒ mobile chrome
 - ☐ samsung
 - ☐ edge
 - ☒ android
 - ☒ chrome
- os**
- ☐ (All)
 - ☒ windows 10
 - ☒ iOS 11
 - ☒ mac os high sierra
 - ☒ android 5.0 lollipop



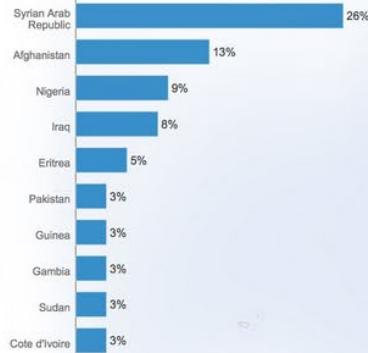
- gender**
- ☐ (All)
 - ☐ male
 - ☒ female
- age**
- ☐ (All)
 - ☐ 18-24
 - ☐ 25-32
 - ☒ 33-40
- country**
- ☐ (All)
 - ☐ united states
 - ☒ canada
 - ☐ france
 - ☐ uk
 - ☐ germany

Refugees/Migrants Emergency Response - Mediterranean

Increasing numbers of refugees and migrants take their chances aboard unseaworthy boats and dinghies in a desperate bid to reach Europe. The vast majority of those attempting this dangerous crossing are in need of international protection, fleeing war, violence and persecution in their country of origin. Every year these movements continue to exact a devastating toll on human life.

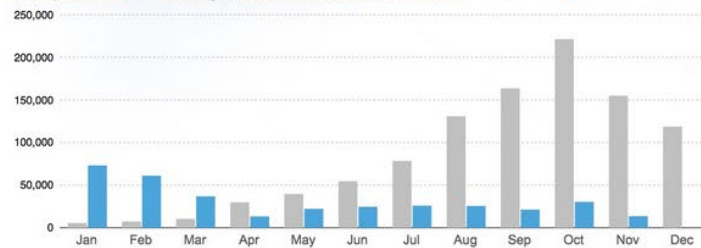
Top-10 nationalities of Mediterranean sea arrivals

Top-10 nationalities represent **77%** of the sea arrivals based on arrivals since 1 Jan 2016

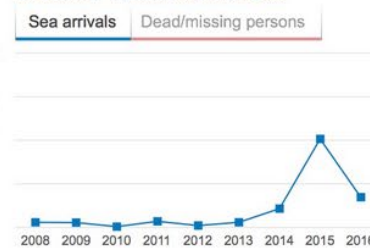


Other countries represent 23% of the total

Comparison of monthly Mediterranean sea arrivals



Evolution - Mediterranean Sea

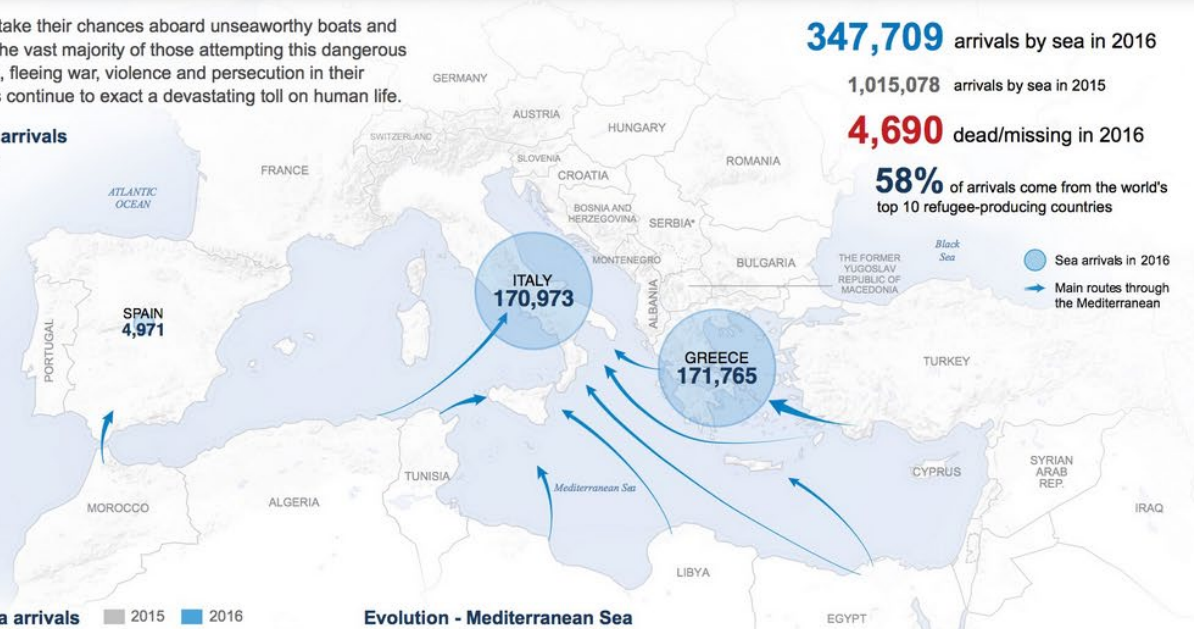


347,709 arrivals by sea in 2016

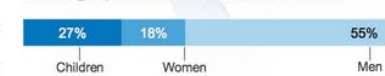
1,015,078 arrivals by sea in 2015

4,690 dead/missing in 2016

58% of arrivals come from the world's top 10 refugee-producing countries



Demographics based on arrivals since 1 Jan 2016



*Serbia (AND KOSOVO: S/RES/1244 (1999))

The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations

[Click here to view sources and disclaimer](#)

Total Accounts YTD



MRR YTD



Average MRR per Account



Trial to Won Conv Rate



Mthly MRR Retention



Marketing

	Values	Plan	vs LY	Monthly Trend
WWW Users	195,671	201,541	▲ 1.8 X	
Trial Starts	9,949	9,850	▲ 1.6 X	
Customers	6,417	6,674	▲ 1.4 X	
Trial to Win Rate	6.2%	5.1%	▲ 1.5 X	
CAC Ratio	1.38	1.39	▲ 1.8 X	

Sales

	Total	Plan	vs LY	Monthly Trend
MRR	\$694,030	\$578,358	▲ 1.7 X	
Avg MRR/Cust.	\$108	\$87	▲ 1.4 X	
Revenue	\$586,358	\$574,631	▲ 2.5 X	
Overall GM	77%	75%	▲ 1.0 X	
CAC/Cust.	\$1,003	\$837	▲ 1.8 X	

Product

	Values	vs LY	Monthly Trend
Uptime	99.95%	▲ 1.0 X	
Account Retention Rate	98.45%	▲ 1.0 X	
Seat Retention Rate	95.52%	▲ 1.0 X	
% DAU	29.00%	▲ 1.0 X	
Crit / Maj Bugs	31	▼ 0.8 X	

Finance

	Values	Plan	vs LY	Monthly Trend
Cash	\$4,206,659	\$4,164,592	▼ 0.7 X	
Monthly Burn	\$705,959	\$691,839	▲ 1.3 X	
Net Monthly Burn	\$64,783	\$63,487	▼ 0.3 X	
AR	\$292,498	\$292,498	▼ 0.9 X	
AP	\$504,456	\$509,502	▲ 1.7 X	

Human Resources

	Values	Plan	vs LY	Monthly Trend
Head Count	64	70	▲ 1.2 X	
Revenue / EE	\$96,388	\$89,492	▲ 1.4 X	
Expenses / EE	\$116,048	\$114,401	▲ 1.1 X	

Services and Support

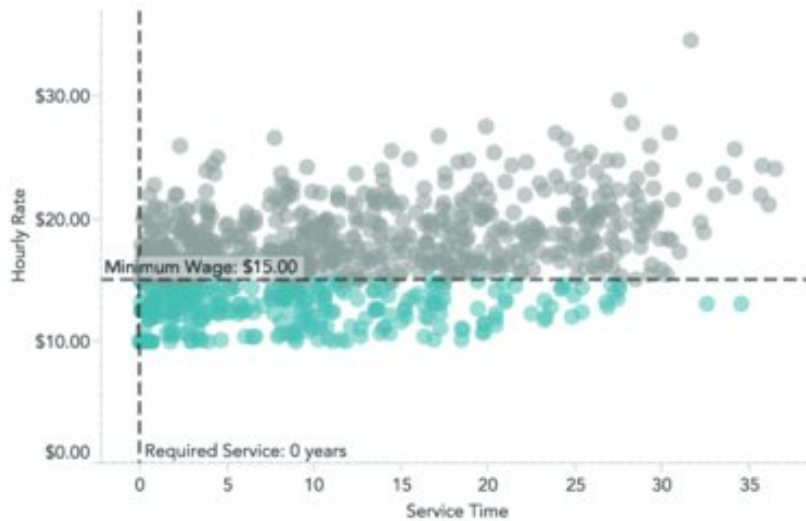
	Values	vs LY	Monthly Trend
New Tickets	713.00	▼ 0.9 X	
Open Tickets	62.00	▲ 1.5 X	
Avg. First Response	8h:12m	▼ 0.8 X	

What-If Analysis: Impact of Minimum Wage

Proposed Minimum Wage: Required Service:

Below
296 (32.1%)

Above
625 (67.9%)



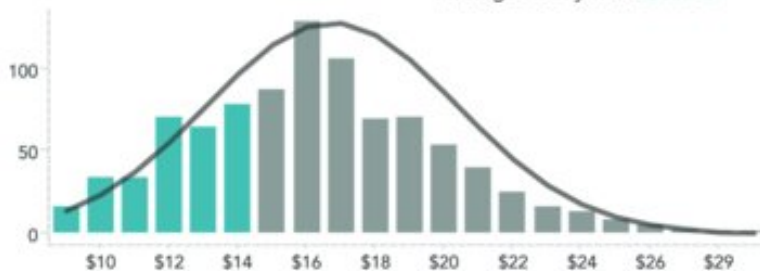
Dollar Impact of
Minimum Wage:
\$1,788,805

Employees Below
Minimum Wage:
296

	Dollar Impact of Minimum Wage:	Employees Below Minimum Wage:
Services	\$812,378	131
Facilities	\$730,562	93
Marketing	\$84,479	23
Logistics	\$50,630	15
Supply Chain	\$37,987	13
Legal	\$27,191	4
Operations	\$12,265	3
Customer Service	\$10,923	4
Information Technology	\$8,760	3
Human Resources	\$7,539	4
Purchasing	\$4,272	1
Research & Development	\$1,818	2

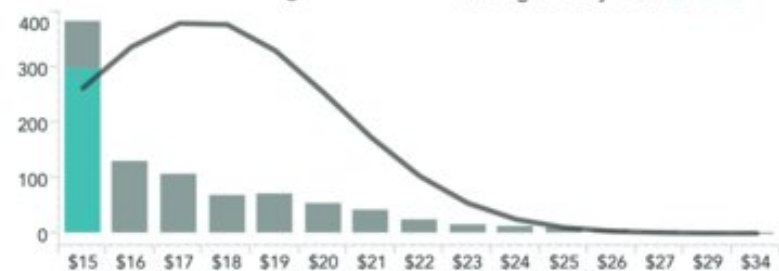
Current Distribution

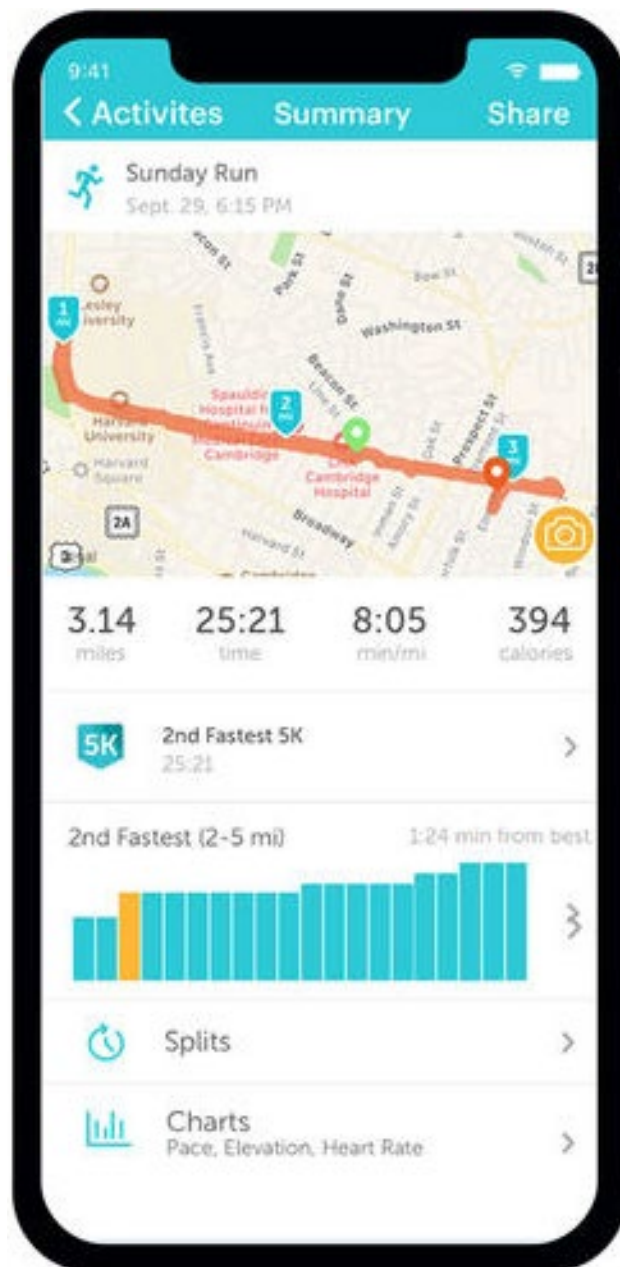
Average Hourly Rate: **\$16.72**



Distribution with Minimum Wage

Average Hourly Rate: **\$17.45**







“Dashboard”

Most common understanding:
“A display with a bunch of charts on it”

Umbrella term for:



“Document”

Most common understanding:
“Page(s) with words/images on them”

Umbrella term for:

- Patent applications
- Movie screenplays
- News articles
- Etc.

~~“Dashboard design best practices”?~~

- ???
- ???
- ???

~~“Document-writing best practices”?~~

- Patent-writing best practices
- Screenplay-writing best practices
- Article-writing best practices

13 types of data displays that are, unfortunately, all called “dashboards”

Dynamic Data Displays

Dynamically generated based on updating data

Usually...

- For enabling employees, customers, partners etc. to interact with an organization's data
- Subdued, plain visual design
- Little/no storytelling (rarely possible)
- Interactive, sometimes complex
- Primary purpose is to answer data-related questions

Monitoring displays

Status displays
Metric introduction displays
Metric diagnostic displays
Alert displays

Performance displays

Performance overview displays
KPI detail displays

Item browsing displays

Disaggregated item displays
Aggregated item displays
Item detail displays

Canned analysis displays

Various types

Static Data Displays

Custom-made based on a static snapshot of data

Usually ...

- Used inside and outside of organizations (training, marketing, public awareness, etc.)
- Eye-catching, creative visual design
- Involves storytelling
- Very basic interactivity, or none
- Primary purpose is to cause a desired change in the mind of an audience

Persuasion displays
Explanation displays
Engagement displays

Monitoring displays

- Enable users to:
 - Spot new developments that **require action**.
 - Maintain awareness of current conditions; what's “normal” and how it's changing.
 - Do so in as little time as possible every day/week/month/etc.

Monitoring displays

- Answer questions such as:
 - “What’s happening (this minute, today, this month, etc.)?”
 - “Is there anything that I need to respond to currently?”
 - “Should I respond to this new development? If so, how?”

13 types of data displays that are, unfortunately, all called “dashboards”

Dynamic Data Displays

Dynamically generated based on updating data

Usually...

- For enabling employees, customers, partners etc. to interact with an organization's data
- Subdued, plain visual design
- Little/no storytelling (rarely possible)
- Interactive, sometimes complex
- Primary purpose is to answer data-related questions

Monitoring displays

Status displays ←
Metric introduction displays
Metric diagnostic displays
Alert displays

Performance displays

Performance overview displays
KPI detail displays

Item browsing displays

Disaggregated item displays
Aggregated item displays
Item detail displays

Canned analysis displays

Various types

Static Data Displays

Custom-made based on a static snapshot of data

Usually ...

- Used inside and outside of organizations (training, marketing, public awareness, etc.)
- Eye-catching, creative visual design
- Involves storytelling
- Very basic interactivity, or none
- Primary purpose is to cause a desired change in the mind of an audience

Engagement displays

Persuasion displays

Explanation displays

Sales Dashboard

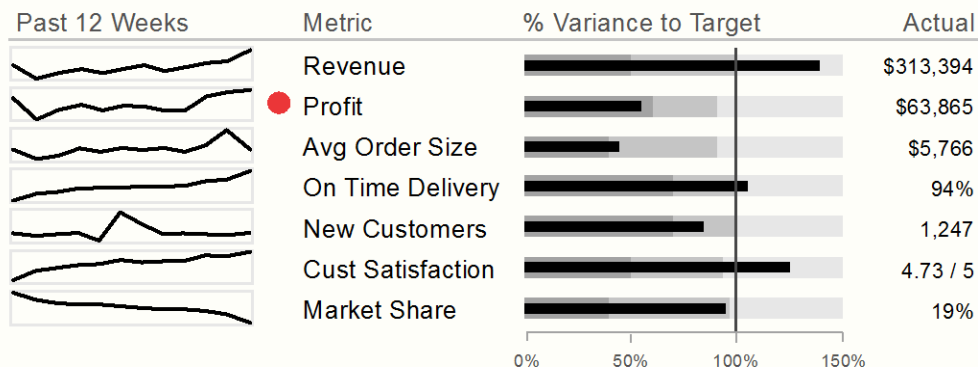
(Data as of December 19, 2013)

■ Actual | Target

Help

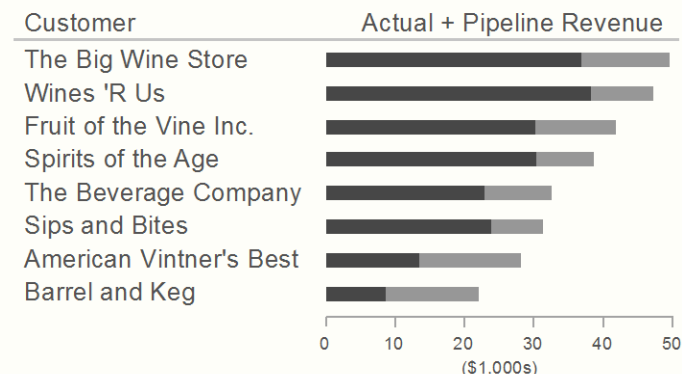
Key Metrics QTD vs. Target to Date

■ Poor ■ Satisfactory ■ Good



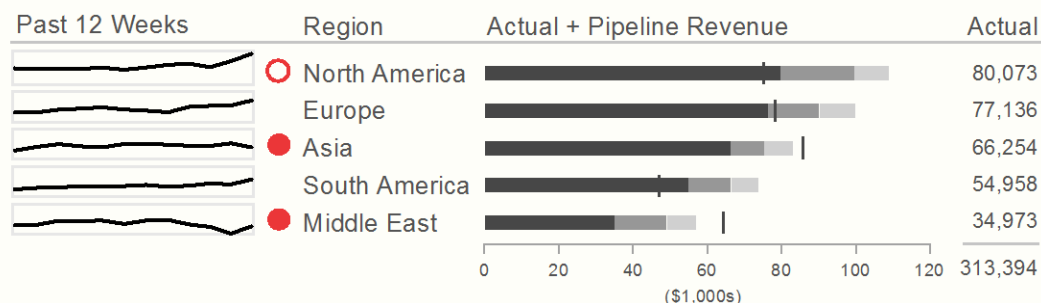
Top Customers this Quarter

■ Pipeline

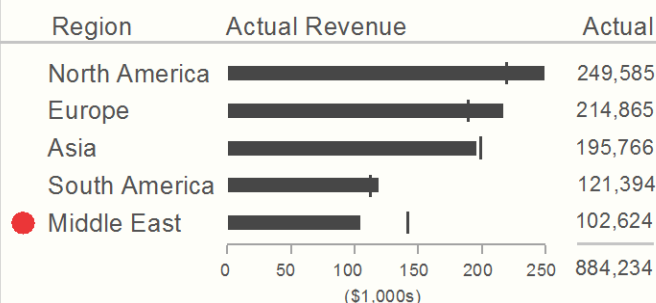


Revenue QTD vs. Target

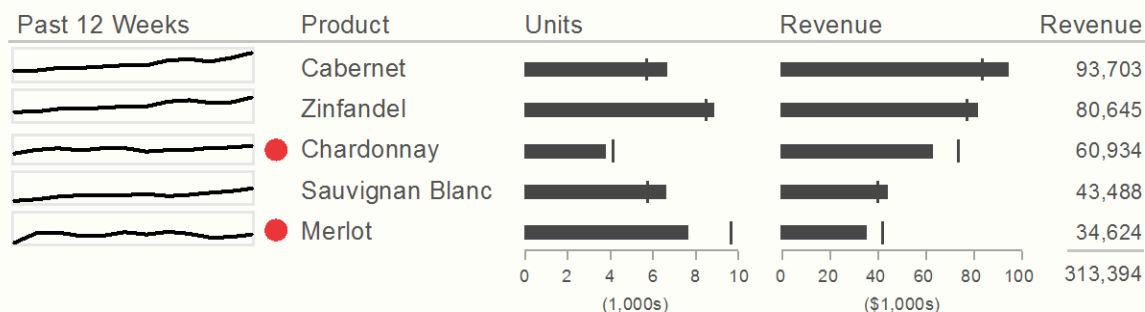
Pipeline: ■ 90% ■ 75%



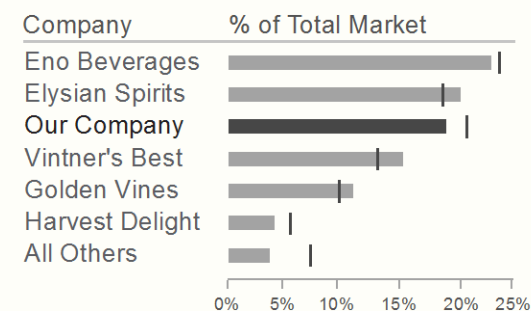
Revenue YTD vs. Target to Date



Product Sales QTD vs. Target to Date

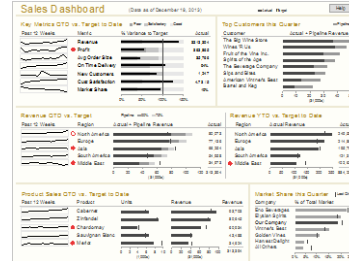


Market Share this Quarter | Last Qtr



The monitoring process

Status display



Sales Dashboard

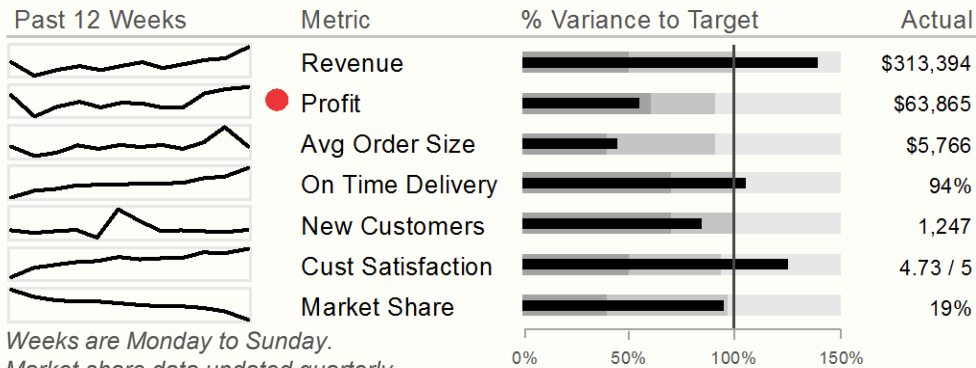
(Data as of December 19, 2013)

■ Actual | Target

Help

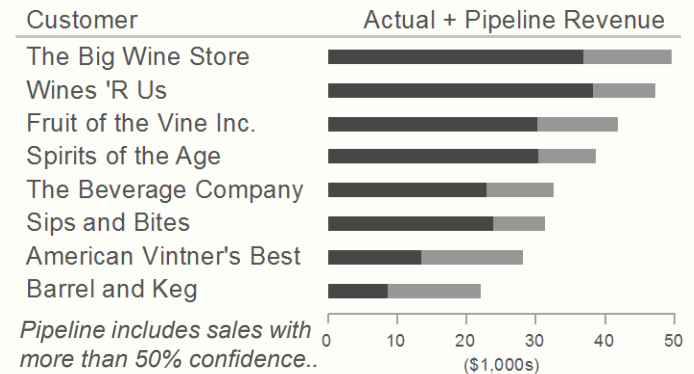
Key Metrics QTD vs. Target to Date

■ Poor ■ Satisfactory ■ Good



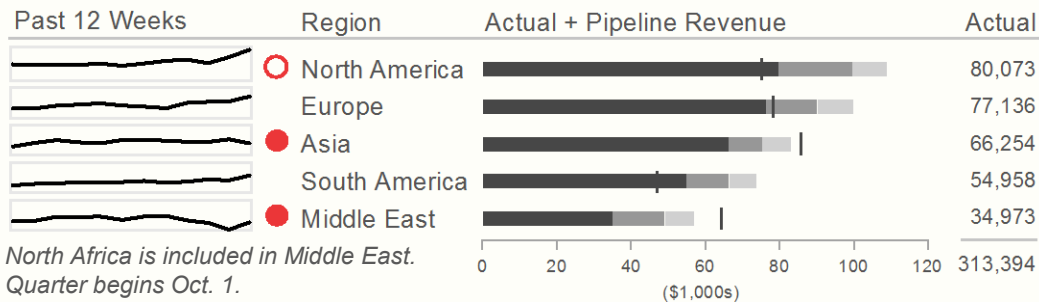
Top Customers this Quarter

■ Pipeline

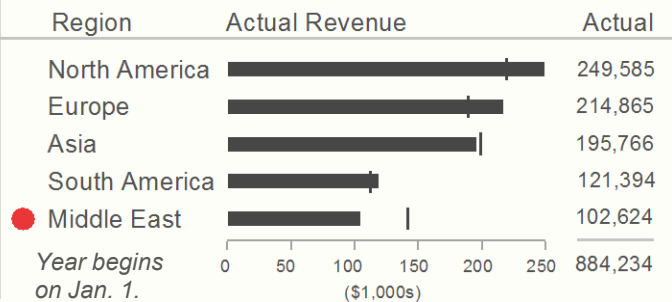


Revenue QTD vs. Target

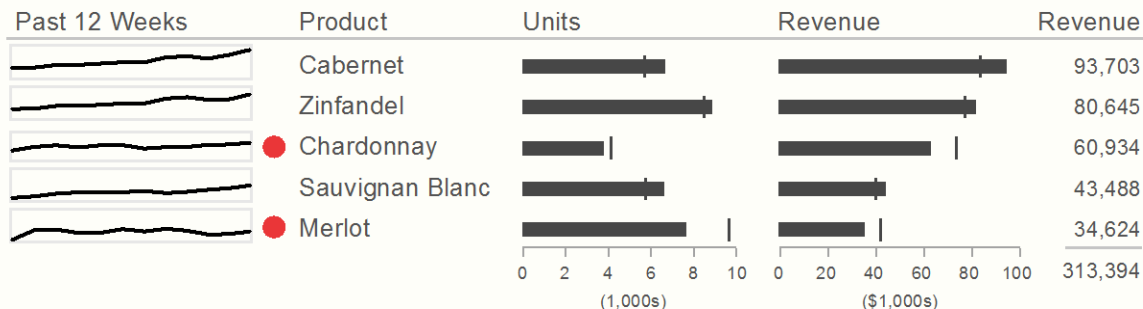
Pipeline: ■ 90% ■ 75%



Revenue YTD vs. Target to Date

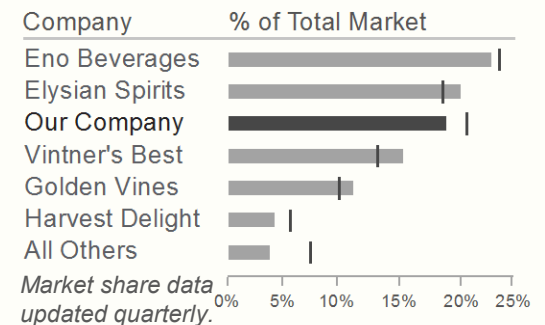


Product Sales QTD vs. Target to Date



Market Share this Quarter

| Last Qtr



13 types of data displays that are, unfortunately, all called “dashboards”

Dynamic Data Displays

Dynamically generated based on updating data

Usually...

- For enabling employees, customers, partners etc. to interact with an organization's data
- Subdued, plain visual design
- Little/no storytelling (rarely possible)
- Interactive, sometimes complex
- Primary purpose is to answer data-related questions

Monitoring displays

Status displays ✓
Metric introduction displays ←
Metric diagnostic displays
Alert displays

Performance displays

Performance overview displays
KPI detail displays

Item browsing displays

Disaggregated item displays
Aggregated item displays
Item detail displays

Canned analysis displays

Various types

Static Data Displays

Custom-made based on a static snapshot of data

Usually ...

- Used inside and outside of organizations (training, marketing, public awareness, etc.)
- Eye-catching, creative visual design
- Involves storytelling
- Very basic interactivity, or none
- Primary purpose is to cause a desired change in the mind of an audience

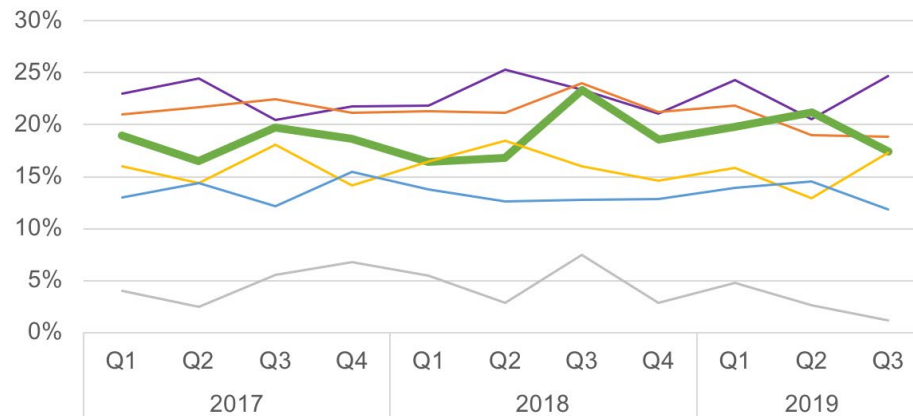
Engagement displays

Persuasion displays

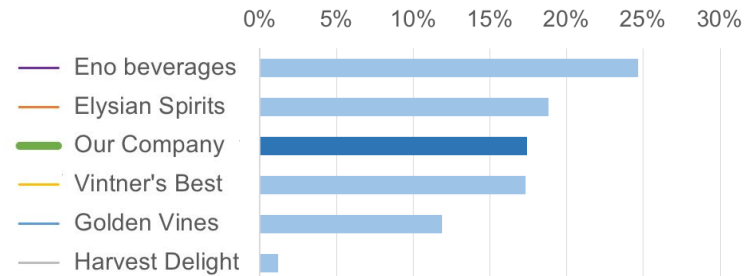
Explanation displays

Metric: “Market share vs. competitors”

Since Q1 2017 (no data available for prior quarters)



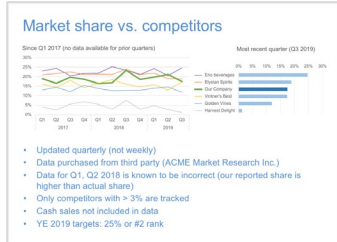
Most recent quarter (Q3 2019)



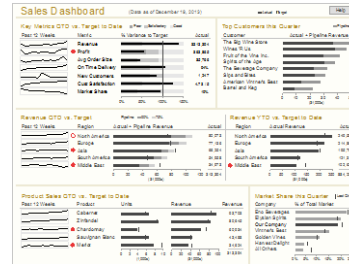
- Updated quarterly (not weekly).
- Data purchased from third party (ACME Market Research Inc.).
- Data for Q1, Q2 2018 is known to be incorrect (our reported share is higher than actual share).
- Only competitors with > 3% market share are tracked.
- Cash sales not included in data.
- YE 2019 targets: 25% or #2 rank

The monitoring process

Metric introduction displays



Status display



Sales Dashboard

(Data as of December 19, 2013)

Actual Target

Help

X

Total Revenue (\$M's) – Northeast Region – Vs. Management Expectations - November 14, 2018

Trailing 8 quarters



Trailing 12 months



Trailing 14 days

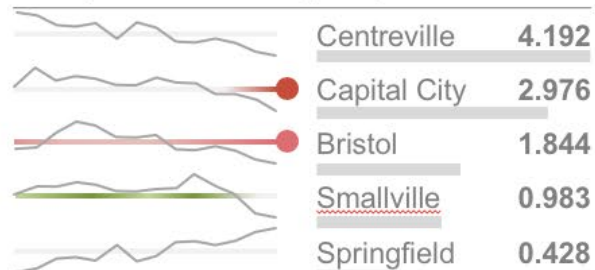


Current value

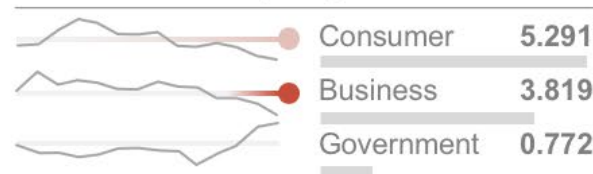
9.618

Broken down by...

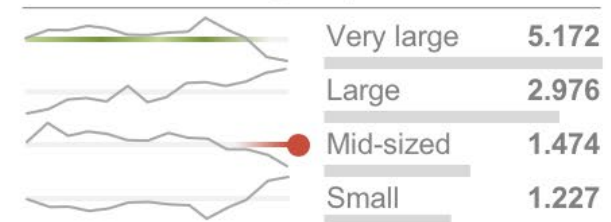
Metropolitan area Trailing 14 days



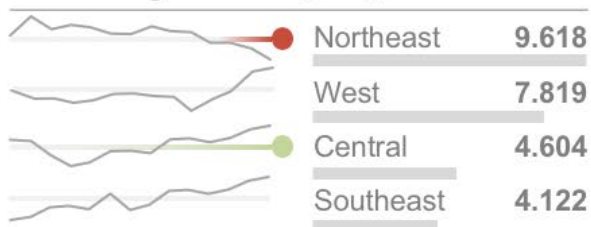
Business Unit Trailing 14 days



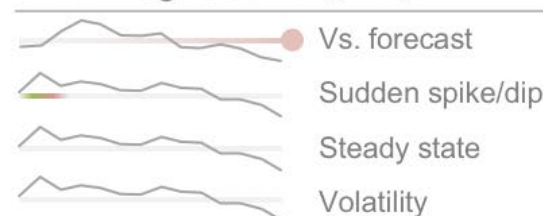
Customer size Trailing 14 days



Other regions Trailing 14 days



Other flag tests Trailing 14 days



Influencer metrics Trailing 14 days



(1,000s)

(\$1,000s)

0% 5% 10% 15% 20% 25%

13 types of data displays that are, unfortunately, all called “dashboards”

Dynamic Data Displays

Dynamically generated based on updating data

Usually...

- For enabling employees, customers, partners etc. to interact with an organization's data
- Subdued, plain visual design
- Little/no storytelling (rarely possible)
- Interactive, sometimes complex
- Primary purpose is to answer data-related questions

Monitoring displays

Status displays ✓
Metric introduction displays ✓
Metric diagnostic displays ✓
Alert displays

Performance displays

Performance overview displays
KPI detail displays

Item browsing displays

Disaggregated item displays
Aggregated item displays
Item detail displays

Canned analysis displays

Various types

Static Data Displays

Custom-made based on a static snapshot of data

Usually ...

- Used inside and outside of organizations (training, marketing, public awareness, etc.)
- Eye-catching, creative visual design
- Involves storytelling
- Very basic interactivity, or none
- Primary purpose is to cause a desired change in the mind of an audience

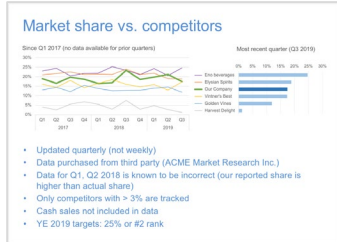
Engagement displays

Persuasion displays

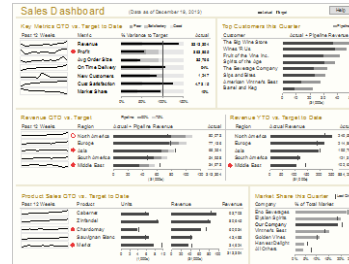
Explanation displays

The monitoring process

Metric introduction displays



Status display



Metric diagnosis displays



Sales Dashboard

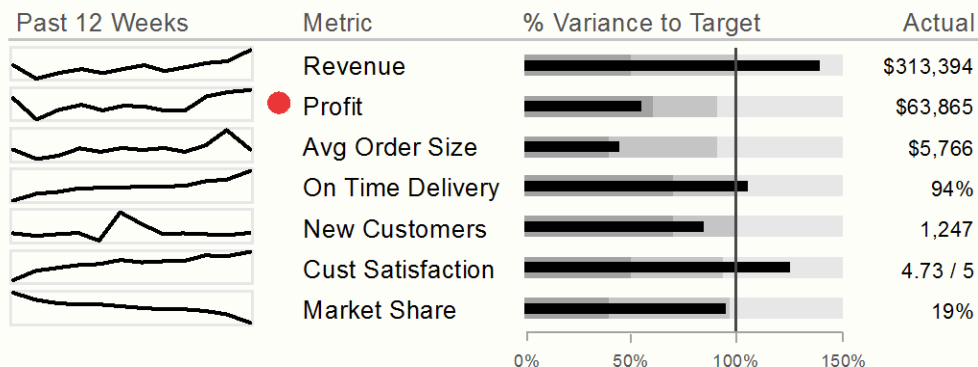
(Data as of December 19, 2013)

■ Actual | Target

Help

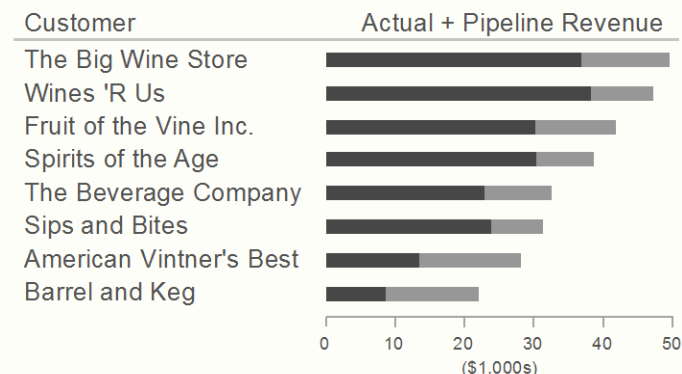
Key Metrics QTD vs. Target to Date

■ Poor ■ Satisfactory ■ Good



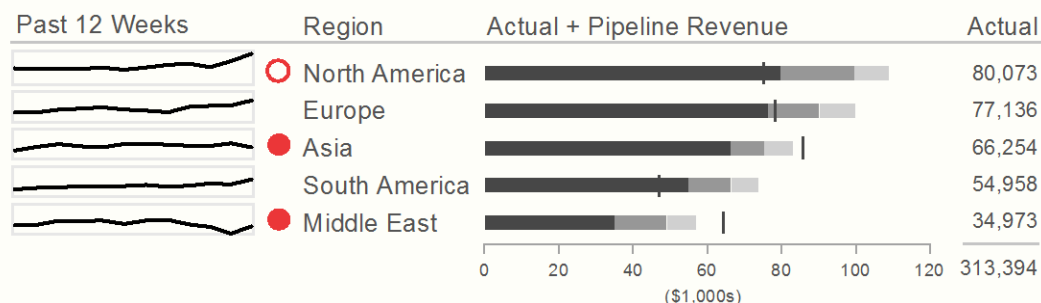
Top Customers this Quarter

■ Pipeline

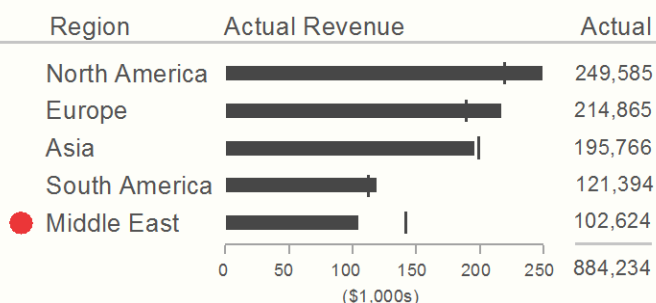


Revenue QTD vs. Target

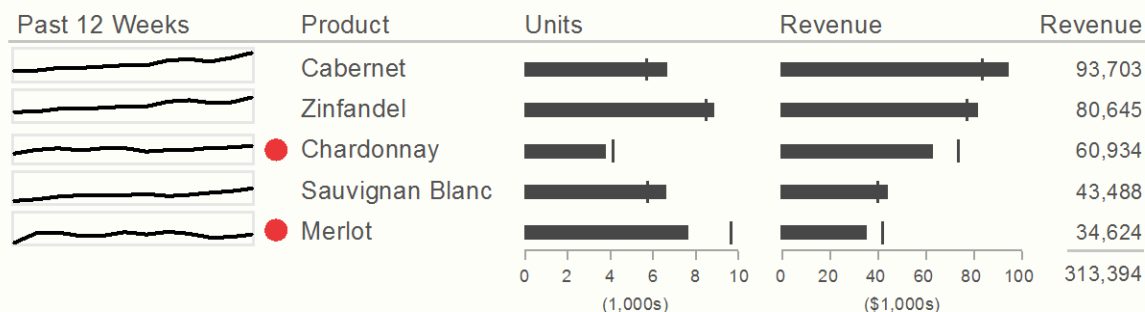
Pipeline: ■ 90% ■ 75%



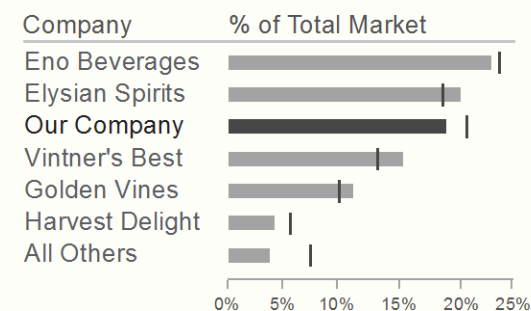
Revenue YTD vs. Target to Date

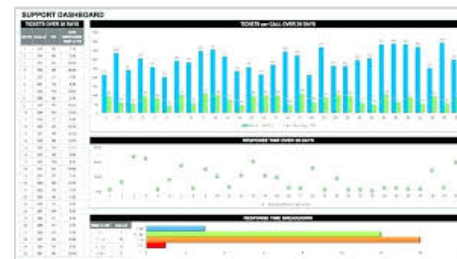
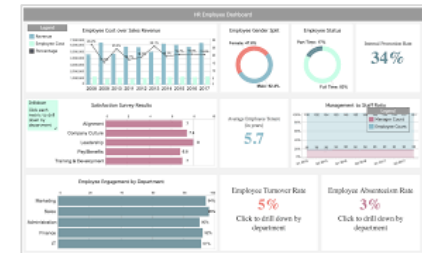
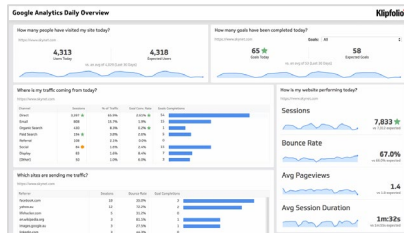
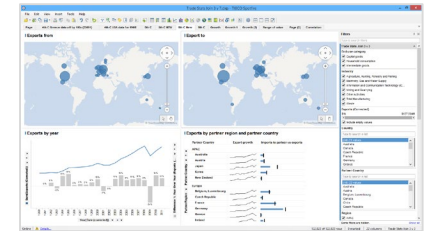
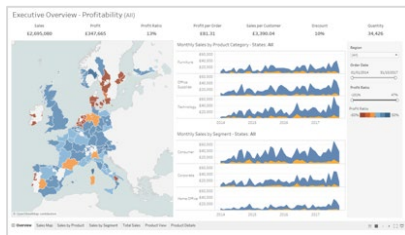


Product Sales QTD vs. Target to Date



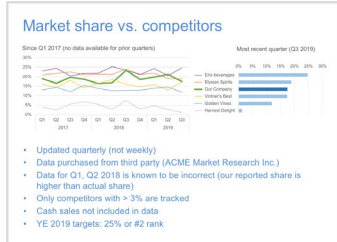
Market Share this Quarter | Last Qtr





The monitoring process

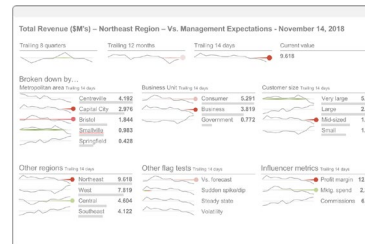
Metric introduction displays



Status displays



Metric diagnosis displays



13 types of data displays that are, unfortunately, all called “dashboards”

Dynamic Data Displays

Dynamically generated based on updating data

Usually...

- For enabling employees, customers, partners etc. to interact with an organization's data
- Subdued, plain visual design
- Little/no storytelling (rarely possible)
- Interactive, sometimes complex
- Primary purpose is to answer data-related questions

Monitoring displays

Status displays ✓
Metric introduction displays ✓
Metric diagnostic displays ✓
Alert displays ←

Performance displays

Performance overview displays
KPI detail displays

Item browsing displays

Disaggregated item displays
Aggregated item displays
Item detail displays

Canned analysis displays

Various types

Static Data Displays

Custom-made based on a static snapshot of data

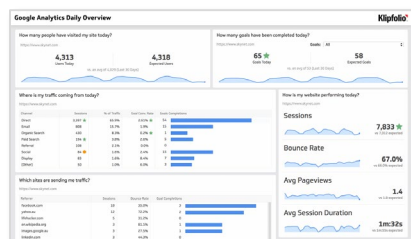
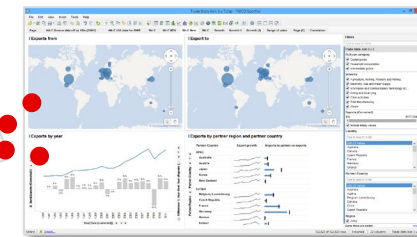
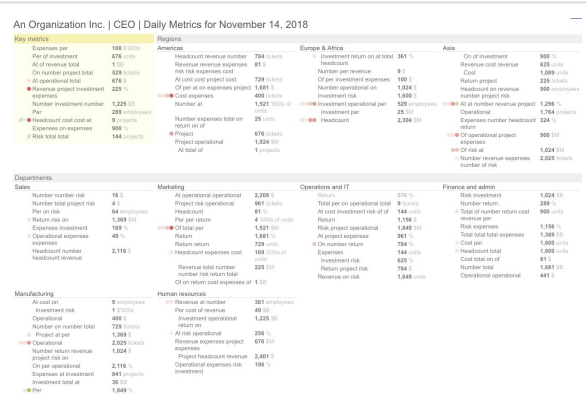
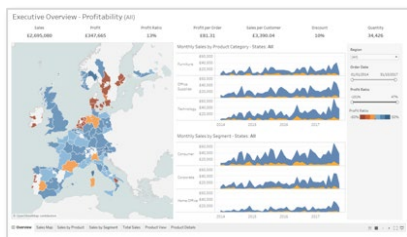
Usually ...

- Used inside and outside of organizations (training, marketing, public awareness, etc.)
- Eye-catching, creative visual design
- Involves storytelling
- Very basic interactivity, or none
- Primary purpose is to cause a desired change in the mind of an audience

Engagement displays

Persuasion displays

Explanation displays

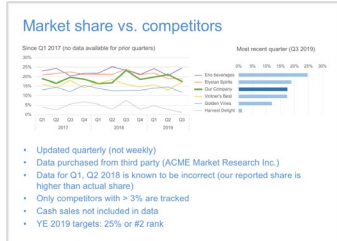


An Organization Inc. | CEO | Daily Metrics for November 14, 2018

Key metrics			Regions		
Expenses per	100	\$'000s	Americas		Europe & Africa
Per of investment	676	units	Headcount revenue number	784	Investment return on at total headcount
At of revenue total	1	\$B	Revenue revenue expenses risk risk expenses cost	81	Number per revenue
On number project total	529	tickets	At cost cost project cost	729	Of per investment expenses
At operational total	676	\$	Of per at on expenses project	1,681	Number operational on
Revenue project investment expenses	225	%	Cost expenses	400	Investment risk
Number investment number	1,225	\$B	Number at	1,521	Investment operational per
Per	289	employees		'000s of units	Investment per
Headcount cost cost at	9	projects	Number expenses total on return on of	25	Headcount
Expenses on expenses	900	%	Project	676	
Risk total total	144	projects	Project operational	1,024	
			At total of	1	
					Asia
					On of investment
					Revenue cost revenue
					Cost
					Return project
					Headcount on revenue number project risk
					At at number revenue project
					Operational
					Expenses number headcount return
					Of operational project expenses
					Of risk at
					Number revenue expenses number of risk

The monitoring process

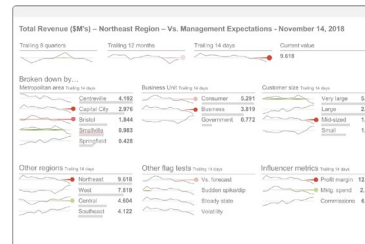
Metric introduction displays



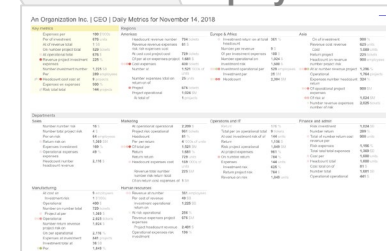
Status displays



Metric diagnosis displays



Alert displays



“And how, exactly, the *\$#%
does one automatically detect
metrics that are likely to require
action?”

Automatically detecting metrics that require action

The goal:

To automatically identify and flag the same metrics that **a competent, informed user** would flag as requiring action if they had an unlimited amount of time to review all metrics all the time.

Automatically detecting metrics that require action

- Key challenges:
 - Can't rely entirely on statistical signal/anomaly detection methods
 - Sometimes, metrics that require action don't behave anomalously
 - Sometimes, metrics that exhibit statistical signals don't actually require action
 - Some metrics resist automated signal/anomaly detection

Automatically detecting metrics that require action

- Key challenges:
 - Metrics can require action for a variety of reasons:
 - Not meeting internal expectations
 - Not meeting external expectations
 - Sudden dip/spike
 - Gradual decrease/increase
 - Unusual volatility
 - Etc.

Automatically detecting metrics that require action

- The solution: A combination of approaches...
 1. Rethink how we identify metrics that require action.
 2. Set flagging conditions for key metrics manually (but informed by statistical analysis).
 3. Set alert conditions automatically (using statistics) for “non-key” metrics.

Rethinking how we flag metrics

- Common ways of flagging metrics that require attention on dashboards don't work!

- “% change vs. previous period”
- “Single-threshold”
- “% deviation from target”
- “Good/Satisfactory/Poor”

CFO | Daily metrics for November 14, 2018

+1.0%	EBITDA (\$M's)	7.3	West Region		Southeast Region		Northeast Region				
+2.7%	Cash Flow from Fin. Activities (\$M's)	12.2	-0.3%	Vendor Expenses (\$M's)	1.1	+1.3%	EBITDA (\$M's)	1.9	+2.4%	Budget Variance	-3.2%
-4.8%	Expenses to Serve One Customer	\$828.8	+2.0%	Current Accounts Receivable (\$M's)	1.6	-2.9%	Vendor Expenses (\$M's)	0.7	+2.3%	Total Revenue (\$M's)	9.6
+5.4%	Employee satisfaction (/10)	7.1	+10.3%	COGs (\$M's)	12.1	-2.5%	Gross Margin	27.5%	-4.0%	Net Margin	11%
-3.6%	Net Margin	10.5%	+1.8%	Employee satisfaction (/10)	7.2	+0.1%	Net Margin	10.4%	-10.9%	Gross Margin	27.3%
-2.8%	Gross Margin	27.4%	+4.3%	EBITDA (\$M's)	2.8	+0.6%	Expenses to Serve One Customer	\$821.6	-4.4%	Current Accounts Payable (\$M's)	1.4
+0.8%	Operating Cash Flow (\$M's)	23.4	-2.3%	Current Ratio	1.1	+1.0%	COGs (\$M's)	8.3	+0.1%	Employee satisfaction (/10)	7.2
-14.6%	Cash on Hand (\$M's)	3.14	-3.5%	Budget Variance	-3.5%	+4.6%	Current Accounts Receivable (\$M's)	1.1	-0.8%	COGs (\$M's)	7
-3.3%	Net Working Capital (\$M's)	3.3	+0.5%	Payment Error Rate	1.8%	+3.7%	Payment Error Rate	1.7%	+3.9%	Expenses to Serve One Customer	\$863.6
+1.8%	Invoice Processing Time	27.2 days				+4.8%	Training cost per employee per day	\$16.6	+4.2%	Total Expenses (\$M's)	8.3
-0.9%	Accounting System Availability	99.1%				-7.0%	Employee satisfaction (/10)	7.4	+8.9%	Inventory (\$M's)	2.8
+10.8%	Total Revenue (\$M's)	1.312				-1.8%	Total Expenses (\$M's)	9.8	+0.4%	Vendor Expenses (\$M's)	0.6
-5.4%	Total Expenses (\$M's)	87.5				-2.7%	Current Accounts Payable (\$M's)	1.6	-1.7%	Quick Ratio	0.7
-5.4%	Budget Variance	-3.2%	Central Region								
+1.4%	Line Items in Budget	178 items	+4.5%	Current Ratio	1.16						
-1.2%	Number of Budget Iterations	7 iterations	+8.6%	Gross Margin	25.5%						
+3.3%	Payroll Staffing Ratio	32.1 emp's	+0.2%	Inventory (\$M's)	1.8						
+15.3%	Vendor Expenses (\$000's)	171.4	+2.5%	Quick Ratio	0.7						
-0.8%	Payment Error Rate	1.7%	+4.1%	Payment Error Rate	1.8%						
-0.5%	Internal Audit Cycle Time	14.5 weeks	+3.3%	Budget Variance	-2.9%						
-4.0%	Finance Error Report	37 reports	+0.8%	COGs (\$M's)	1.3%						
-10.3%	Return on Equity	6.2%	-12.0%	Current Accounts Payable (\$M's)	0.9						
-4.3%	Total Cost of Finance Function (\$K's)	401	+2.4%	EBITDA (\$M's)	1.312						
-3.0%	Cost of Finance Function per \$1K Rev.	\$9.15	+2.3%	Expenses to Serve One Customer	\$833.6						
-0.3%	Innovation Spending (\$M's)	2.851									
+1.7%	Training cost per employee per day	\$17.45									
-4.8%	Budget Variance	1.3%									
+2.5%	USD/EUR	\$1.136	Industrial B.U.		Medical B.U.		Consumer B.U.				
-3.9%	USD/YEN	\$0.009	-6.0%	Total Revenue (\$M's)	11	+1.0%	Net Margin	10.6%	-2.4%	Net Margin	10.1%
-4.5%	USD/GBP	\$1.266	+5.0%	Gross Margin	30%	-7.7%	Expenses to Serve One Customer	\$907.1	-3.6%	Gross Margin	25.1%
-4.4%	USD/CYN	\$0.145	+2.9%	Payment Error Rate	1.6%	+4.3%	Current Accounts Payable (\$M's)	0.9	-0.9%	Vendor Expenses (\$M's)	1.7
-1.0%	USD/CAD	\$0.752	+2.9%	Training cost per employee per day	\$17.3	-1.3%	COGs (\$M's)	4.5	-6.5%	Current Ratio	1.1
-11.5%	Closing price: OURCORP	\$44.21	+9.1%	Inventory (\$M's)	3.2	-7.6%	Budget Variance	1.3%	+3.2%	Total Revenue (\$M's)	26.7
-3.7%	Closing price: COMP1	\$17.85	-8.0%	Expenses to Serve One Customer	\$846.2	-3.7%	Quick Ratio	0.7	+2.3%	Budget Variance	-3.3%
-10.1%	Closing price: COMP2	\$93.57	-0.2%	Current Accounts Payable (\$M's)	1.6	+1.3%	Vendor Expenses (\$M's)	0.4	-11.5%	EBITDA (\$M's)	4.5
-8.9%	Closing price: SUPPL1	\$34.5	+9.5%	Net Margin	9.6%	+8.6%	Inventory (\$M's)	1.8	-6.5%	Training cost per employee per day	\$19.3
+4.8%	Closing price: SUPPL2	\$4.12	+4.8%	Employee satisfaction (/10)	6.6	+1.8%	Current Accounts Receivable (\$M's)	0.6	-0.8%	Current Accounts Receivable (\$M's)	2.5
-4.2%	Closing price: PART1	\$17.01	+6.5%	Budget Variance	-3.2%	+0.2%	Current Ratio	1.2	+1.8%	Budget Variance	1.2%
-1.8%	Closing price: PART2	\$46.57	+6.8%	Quick Ratio	0.7	+1.8%	Budget Variance	-3.2%	-0.7%	Total Expenses (\$M's)	22.9
			+1.8%	Vendor Expenses (\$M's)	0.7	-5.9%	Gross Margin	27.9%			
						-1.5%	Total Expenses (\$M's)	5.3			
						-0.8%	EBITDA (\$M's)	1			

CFO | Daily metrics for November 14, 2018

+1.0% EBITDA (\$M's)7.3

+2.7% Cash Flow from Fin. Activities (\$M's)12.2

-4.8% Expenses to Serve One Customer\$828.8

+5.4% Employee satisfaction (/10)7.1

-3.6% Net Margin10.5%

-2.8% Gross Margin27.4%

+0.8% Operating Cash Flow (\$M's)23.4

-14.6% Cash on Hand (\$M's)3.14

+2.3% Net Working Capital (\$M's)3.3

West Region

-0.3% Vendor Expenses (\$M's)1.1

+2.0% Current Accounts Receivable (\$M's)1.6

+10.3% COGs (\$M's)12.1

+1.8% Employee satisfaction (/10)7.2

+4.3% EBITDA (\$M's)2.8

-2.3% Current Ratio1.1

-3.5% Budget Variance-3.5%

+0.8% Payment Error Rate1.8%

Southeast Region

+1.3% EBITDA (\$M's)1.9

-2.9% Vendor Expenses (\$M's)0.7

-2.5% Gross Margin27.5%

+0.1% Net Margin10.4%

+0.6% Expenses to Serve One Customer\$821.6

+1.0% COGs (\$M's)8.3

+4.6% Current Accounts Receivable (\$M's)1.1

+3.7% Payment Error Rate1.7%

-4.3% Training cost per employee per day\$16.6

+0.9% Employee satisfaction (/10)7.4

+0.3% Total Expenses (\$M's)9.8

-0.7% Current Accounts Payable (\$M's)1.6

+0.3% Inventory (\$M's)3.3

Northeast Region

+2.4% Budget Variance-3.2%

+2.3% Total Revenue (\$M's)9.6

-4.0% Net Margin11%

-10.9% Gross Margin27.3%

-4.4% Current Accounts Payable (\$M's)1.4

+0.1% Employee satisfaction (/10)7.2

-0.8% COGs (\$M's)7

+3.9% Expenses to Serve One Customer\$863.6

+4.2% Total Expenses (\$M's)8.3

+8.9% Inventory (\$M's)2.8

+0.4% Vendor Expenses (\$M's)0.6

-1.7% Quick Ratio0.7

Vendor expenses (\$K's)

300

250

200

150

100

50

0

1

2

3

4

5

6

7

8

9

10

11

12

13

14

November

-11.5% Closing price: COMP1\$17.85

-3.7% Closing price: COMP2\$93.57

-10.1% Closing price: SUPPL1\$34.5

-8.9% Closing price: SUPPL2\$4.12

+4.8% Closing price: PART1\$17.01

-4.2% Closing price: PART2\$46.57

Global B.U.

-0.5% Net Margin10.6%

-7.1% Expenses to Serve One Customer\$907.1

-1.1% Current Accounts Payable (\$M's)0.9

-1.1% COGs (\$M's)4.5

-0.8% Budget Variance1.3%

-3.7% Quick Ratio0.7

+1.3% Vendor Expenses (\$M's)0.4

+8.6% Inventory (\$M's)1.8

+1.8% Current Accounts Receivable (\$M's)0.6

+0.2% Current Ratio1.2

+1.8% Budget Variance-3.2%

-5.9% Gross Margin27.9%

-1.5% Total Expenses (\$M's)5.3

-0.8% EBITDA (\$M's)1

Consumer B.U.

-2.4% Net Margin10.1%

-3.6% Gross Margin25.1%

-0.9% Vendor Expenses (\$M's)1.7

-6.5% Current Ratio1.1

+3.2% Total Revenue (\$M's)26.7

+2.3% Budget Variance-3.3%

-11.5% EBITDA (\$M's)4.5

-6.5% Training cost per employee per day\$19.3

-0.8% Current Accounts Receivable (\$M's)2.5

+1.8% Budget Variance1.2%



-0.7% Total Expenses (\$M's)22.9


"Vs. previous day/week/month" x

+

← → ↻

https://www.practicalreporting.com/blog/2018/10/29/vs-previous-dayweekmonth-values-on-dashboar...





SERVICESBLOG2019 BOOK!ABOUTCONTACT/FOLLOW

"Vs. Previous Day/Week/Month" On Dashboards: Worse Than Useless? (Book Excerpt)

October 30, 2018

tl;dr: This excerpt from my upcoming book, [Beyond Dashboards](#), is the third in a seven-part series on how to determine which metrics to visually flag on a dashboard (i.e., with alert dots, different-colored text, etc.) in order to draw attention to metrics that require it. In this post, I look at the "vs. previous period" method of flagging dashboard metrics and why, despite being extremely common, this method for drawing attention to metrics can be worse than useless. In a later post in this series, I'll introduce a more useful approach called ["four-threshold" visual flags](#).

Probably the most common way to visually flag metrics that require attention on a dashboard is the "vs. previous period" method, whereby each current value has a "vs. previous day" (or previous week, or previous month, etc.) flag next to it, usually expressed as a percentage change with an indicator of positive or negative change:

		vs. yesterday
Revenue	\$745,121	▼ 1.0%
Profit	\$87,179	▲ 3.2%
Average order size	\$71.31	▼ 4.6%
Customer satisfaction	7.4	▲ 8.5%

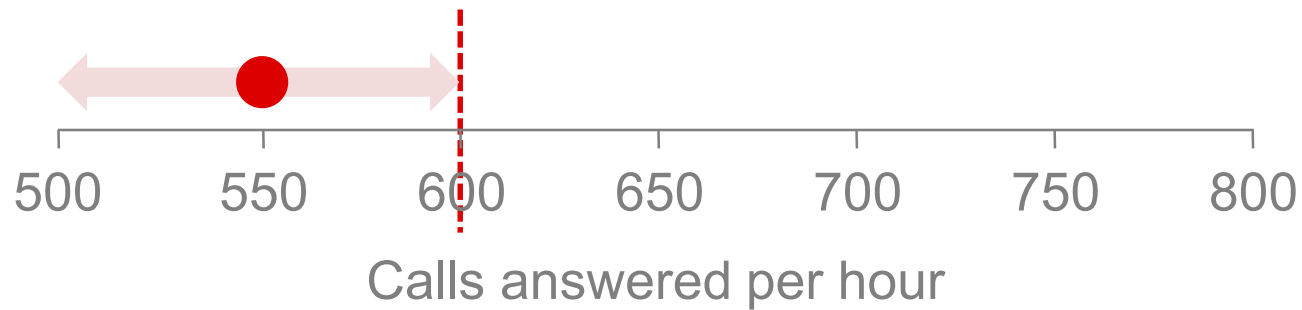
With “% change vs. previous period”...

- A big % change may or may not require action.
- A small % change may or may not require action.
- A green % change may or may not indicate a metric that's doing well.
- A red % change may or may not indicate a metric that's doing poorly.
- A positive % change may or may not indicate a metric that's trending upward.
- A negative % change may or may not indicate a metric that's trending downward.
- **NOT A GOOD WAY TO IDENTIFY METRICS THAT REQUIRE ACTION!**

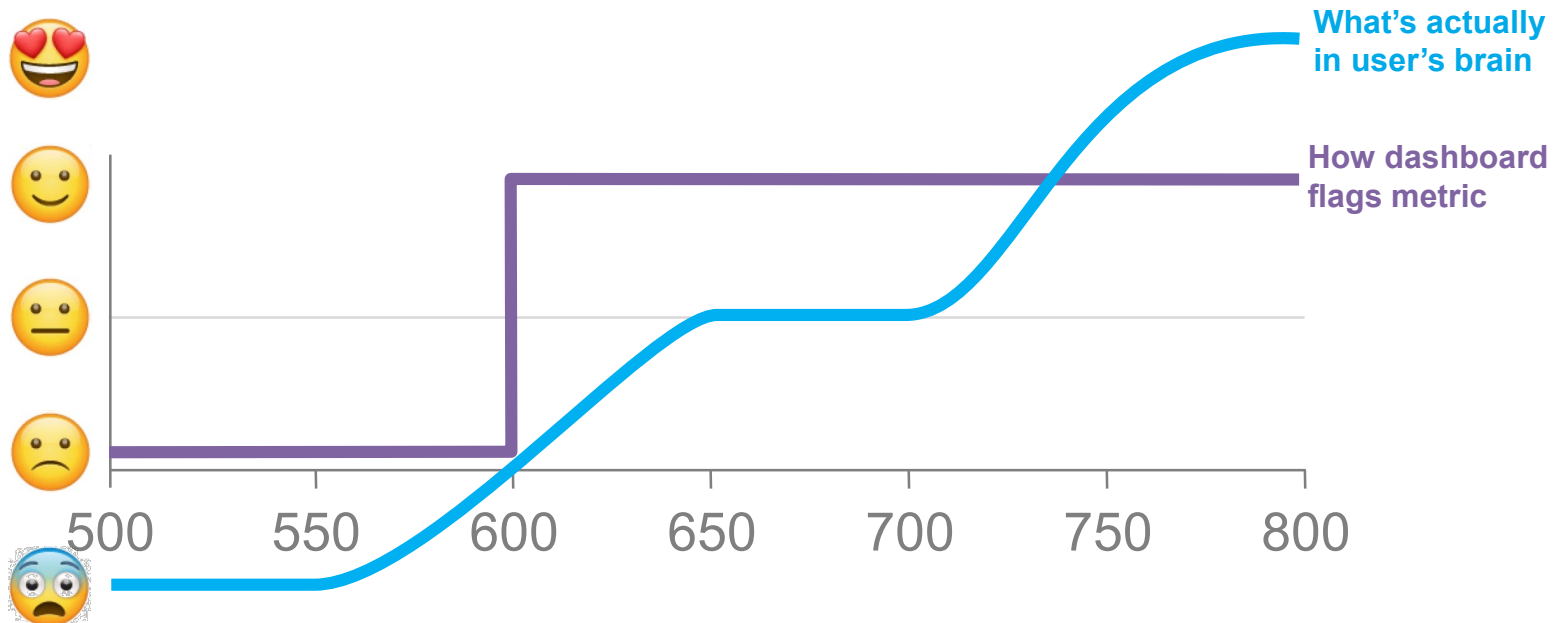
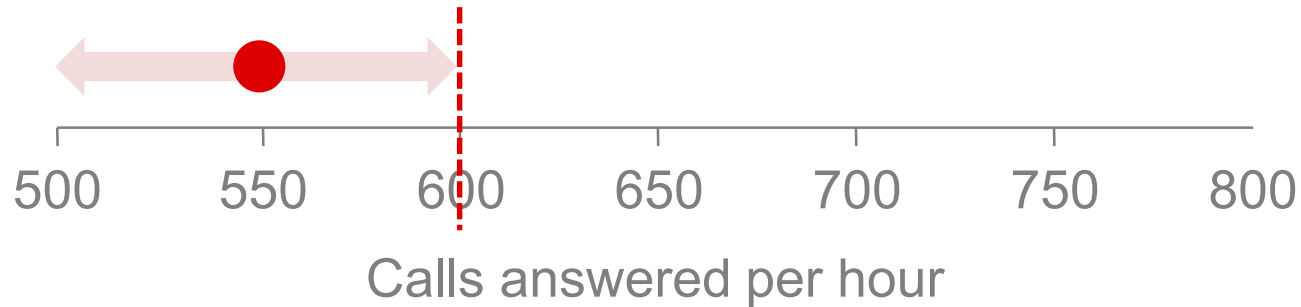
Rethinking how we flag metrics

- Common ways of flagging metrics on that require attention on dashboards don't work!
 - “% change vs. previous period”
 - “Single-threshold”
 - “% deviation from target”
 - “Good/Satisfactory/Poor”

Single-threshold flags



Single-threshold flags



CFO | Daily metrics for November 14, 2018

[illegible]

CFO | Daily metrics for November 14, 2018

● EBITDA (\$M's)	7.3
● Cash Flow from Fin. Activities (\$M's)	12.2
● Expenses to Serve One Customer	\$828.8
● Employee satisfaction (/10)	7.1
● Net Margin	10.5%
● Gross Margin	27.4%
● Operating Cash Flow (\$M's)	23.4
● Cash on Hand (\$M's)	3.14
● Net Working Capital (\$M's)	3.3
● Current Accounts Receivable (\$M's)	4.1
● Current Accounts Payable (\$M's)	6.3
● Invoice Processing Time	27.2 days
● Accounting System Availability	99.1%
● Total Revenue (\$M's)	1.312
● Total Expenses (\$M's)	37.6
● Budget Variance	-3.2%
● Line Items in Budget	178 items
● Number of Budget Iterations	7 iterations
● Payroll Staffing Ratio	32.1 emp's
● Vendor Expenses (\$000's)	171.4
● Payment Error Rate	1.7%
● Internal Audit Cycle Time	14.5 weeks
● Finance Error Report	37 reports
● Return on Equity	6.2%
● Total Cost of Finance Function (\$K's)	401
● Cost of Finance Function per \$1K Rev.	\$9.15
● Innovation Spending (\$M's)	2.851
● Training cost per employee per day	\$17.45
● Budget Variance	1.3%
● USD/EUR	\$1.136
● USD/YEN	\$0.009
● USD/GBP	\$1.266
● USD/CYN	\$0.145
● USD/CAD	\$0.752
● Closing price: OURCORP	\$44.21
● Closing price: COMP1	\$17.85
● Closing price: COMP2	\$93.57
● Closing price: SUPPL1	\$34.5
● Closing price: SUPPL2	\$4.12
● Closing price: PART1	\$17.01
● Closing price: PART2	\$46.57

West Region	
● Vendor Expenses (\$M's)	1.1
● Current Accounts Receivable (\$M's)	1.6
● COGs (\$M's)	12.1
● Employee satisfaction (/10)	7.2
● EBITDA (\$M's)	2.8
● Current Ratio	1.1
● Budget Variance	-3.5%
● Payment Error Rate	1.8%
● Budget Variance	1.4%
● Expenses to Serve One Customer	\$882.9
● Quick Ratio	0.7
● Inventory (\$M's)	4.9
Central Region	
● Current Ratio	1.16
● Gross Margin	25.5%
● Inventory (\$M's)	1.8
● Quick Ratio	0.7
● Payment Error Rate	1.8%
● Budget Variance	-2.9%
● COGs (\$M's)	1.3%
● Current Accounts Payable (\$M's)	0.9
● EBITDA (\$M's)	1.312
● Expenses to Serve One Customer	\$833.6

Southeast Region	
● EBITDA (\$M's)	1.9
● Vendor Expenses (\$M's)	0.7
● Gross Margin	27.5%
● Net Margin	10.4%
● Expenses to Serve One Customer	\$821.6
● COGs (\$M's)	8.3
● Current Accounts Receivable (\$M's)	1.1
● Payment Error Rate	1.7%
● Training cost per employee per day	\$16.6
● Employee satisfaction (/10)	7.4
● Total Expenses (\$M's)	9.8
● Current Accounts Payable (\$M's)	1.6
● Inventory (\$M's)	3.3

Northeast Region	
● Budget Variance	-3.2%
● Total Revenue (\$M's)	9.6
● Net Margin	11%
● Gross Margin	27.3%
● Current Accounts Payable (\$M's)	1.4
● Employee satisfaction (/10)	7.2
● COGs (\$M's)	7
● Expenses to Serve One Customer	\$863.6
● Total Expenses (\$M's)	8.3
● Inventory (\$M's)	2.8
● Vendor Expenses (\$M's)	0.6
● Quick Ratio	0.7

Industrial B.U.	
● Total Revenue (\$M's)	11
● Gross Margin	30%
● Payment Error Rate	1.6%
● Training cost per employee per day	\$17.3
● Inventory (\$M's)	3.2
● Expenses to Serve One Customer	\$846.2
● Current Accounts Payable (\$M's)	1.6
● Net Margin	9.6%
● Employee satisfaction (/10)	6.6
● Budget Variance	-3.2%
● Quick Ratio	0.7
● Vendor Expenses (\$M's)	0.7

Medical B.U.	
● Net Margin	10.6%
● Expenses to Serve One Customer	\$907.1
● Current Accounts Payable (\$M's)	0.9
● COGs (\$M's)	4.5
● Budget Variance	1.3%
● Quick Ratio	0.7
● Vendor Expenses (\$M's)	0.4
● Inventory (\$M's)	1.8
● Current Accounts Receivable (\$M's)	0.6
● Current Ratio	1.2
● Budget Variance	-3.2%
● Gross Margin	27.9%
● Total Expenses (\$M's)	5.3
● EBITDA (\$M's)	1

Consumer B.U.	
● Net Margin	10.1%
● Gross Margin	25.1%
● Vendor Expenses (\$M's)	1.7
● Current Ratio	1.1
● Total Revenue (\$M's)	26.7
● Budget Variance	-3.3%
● EBITDA (\$M's)	4.5
● Training cost per employee per day	\$19.3
● Current Accounts Receivable (\$M's)	2.5
● Budget Variance	1.2%
● Total Expenses (\$M's)	22.9

CFO | Daily metrics for November 14, 2018

EBITDA (\$M's)	7.3
Cash Flow from Fin. Activities (\$M's)	12.2
Expenses to Serve One Customer	\$828.8
Employee satisfaction (/10)	7.1
Net Margin	10.5%
Gross Margin	27.4%
Operating Cash Flow (\$M's)	23.4
Cash on Hand (\$M's)	3.14
Net Working Capital (\$M's)	3.3
Current Accounts Receivable (\$M's)	4.1

Invoice Processing Time
Accounting System Availability
Total Revenue (\$M's)

Budget Variance	-3.2%
Line Items in Budget	178 items
Number of Budget Iterations	7 iterations
Payroll Staffing Ratio	32.1 emp's
Vendor Expenses (\$000's)	171.4
Payment Error Rate	1.7%
Internal Audit Cycle Time	14.5 weeks
Finance Error Report	37 reports
Return on Equity	6.2%
Total Cost of Finance Function (\$K's)	401
Cost of Finance Function per \$1K Rev.	\$9.15
Innovation Spending (\$M's)	2.851
Training cost per employee per day	\$17.45
Budget Variance	1.3%
USD/EUR	\$1.136
USD/YEN	\$0.009
USD/GBP	\$1.266
USD/CYN	\$0.145
USD/CAD	\$0.752
Closing price: OURCORP	\$44.21
Closing price: COMP1	\$17.85
Closing price: COMP2	\$93.57
Closing price: SUPPL1	\$34.5
Closing price: SUPPL2	\$4.12
Closing price: PART1	\$17.01
Closing price: PART2	\$46.57

West Region	
Vendor Expenses (\$M's)	1.1
Current Accounts Receivable (\$M's)	1.6
COGs (\$M's)	12.1
Employee satisfaction (/10)	7.2
EBITDA (\$M's)	2.8
Current Ratio	1.1
Budget Variance	-3.5%
Payment Error Rate	1.8%
Budget Variance	1.4%

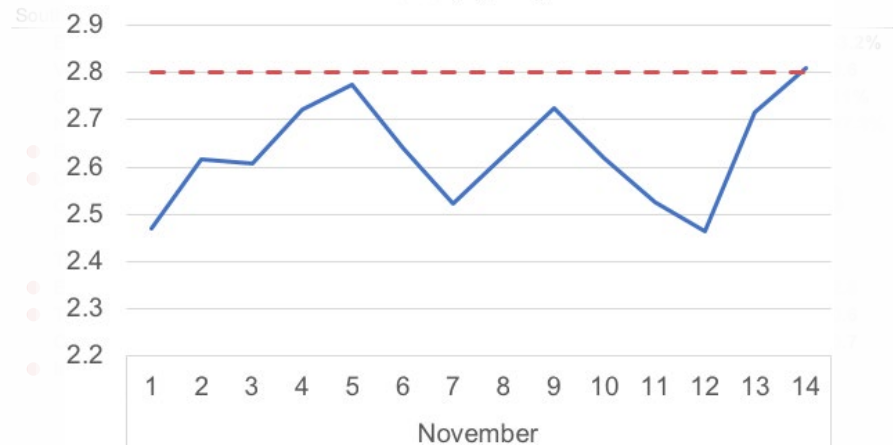
27.2 days	Customer	\$882.9
99.1%		0.7
1.312		4.9

Central Region	
Current Ratio	1.16
Gross Margin	25.5%
Inventory (\$M's)	1.8
Quick Ratio	0.7
Payment Error Rate	1.8%
Budget Variance	-2.9%
COGs (\$M's)	1.3%
Current Accounts Payable (\$M's)	0.9
EBITDA (\$M's)	1.312
Expenses to Serve One Customer	\$833.6

Industrial B.U.	
Total Revenue (\$M's)	11
Gross Margin	30%
Payment Error Rate	1.6%
Training cost per employee per day	\$17.3
Inventory (\$M's)	3.2
Expenses to Serve One Customer	\$846.2
Current Accounts Payable (\$M's)	1.6
Net Margin	9.6%
Employee satisfaction (/10)	6.6
Budget Variance	-3.2%
Quick Ratio	0.7
Vendor Expenses (\$M's)	0.7

South Region	
Inventory (\$M's)	2.9
Current Accounts Payable (\$M's)	0.9
COGs (\$M's)	4.5
Budget Variance	1.3%
Quick Ratio	0.7
Vendor Expenses (\$M's)	0.4
Inventory (\$M's)	1.8
Current Accounts Receivable (\$M's)	0.6
Current Ratio	1.2
Budget Variance	-3.2%
Gross Margin	27.9%
Total Expenses (\$M's)	5.3
EBITDA (\$M's)	1

Inventory (\$M's)




November

Medical B.U.	
Net Margin	10.6%
Expenses to Serve One Customer	\$907.1
Current Accounts Payable (\$M's)	0.9
COGs (\$M's)	4.5
Budget Variance	1.3%
Quick Ratio	0.7
Vendor Expenses (\$M's)	0.4
Inventory (\$M's)	1.8
Current Accounts Receivable (\$M's)	0.6
Current Ratio	1.2
Budget Variance	-3.2%
Gross Margin	27.9%
Total Expenses (\$M's)	5.3
EBITDA (\$M's)	1

Consumer B.U.	
Net Margin	10.1%
Gross Margin	25.1%
Vendor Expenses (\$M's)	1.7
Current Ratio	1.1
Total Revenue (\$M's)	26.7
Budget Variance	-3.3%
EBITDA (\$M's)	4.5
Training cost per employee per day	\$19.3
Current Accounts Receivable (\$M's)	2.5
Budget Variance	1.2%
Total Expenses (\$M's)	22.9

Single-threshold flags on dashi x +

← → ↻ 🔒 https://www.practicalreporting.com/blog/2018/11/5/single-threshold-flags-on-dashboards-very-com... 👤 ⬆

PRACTICAL
Reporting
Inc.

SERVICESBLOG2019 BOOK!ABOUTCONTACT/FOLLOW

Single-Threshold Flags On Dashboards: Very Common And Very Problematic (Book Excerpt)

November 6, 2018

tl;dr: This excerpt from my upcoming book, [Beyond Dashboards](#), is the fourth in a seven-part series on determining which metrics to visually flag on a dashboard (i.e., with alert dots, different-colored text, etc.) in order to draw attention to metrics that require it. In this post, I look at the “single-threshold” method of determining which metrics to flag and why, despite being extremely common, this method has several major drawbacks that become obvious when pointed out. In a later post in this series, I’ll introduce a more useful approach called “[four-threshold](#)” visual flags.

One of the most common ways to determine which metrics to visually flag on a dashboard is what I call the “single-threshold” method. On dashboards that use this method, a threshold value is chosen for each metric and metrics that fall below (or, for some metrics, above) that threshold value get flagged:

Revenue	\$745,121
● Profit	\$87,179
Average order size	\$71.31
New customers	421
Customer satisfaction	7.4

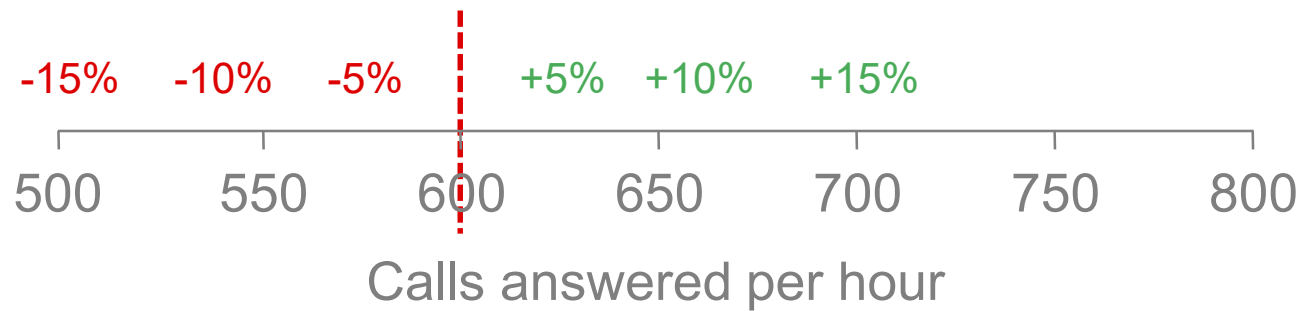
With “single-threshold” flags...

- Hard for users to set.
- Crises look the same as minor problems.
- Metrics that are doing exceptionally well don't get flagged.
- Sudden dips, spikes, etc. don't get flagged.
- **NOT A GOOD WAY TO IDENTIFY METRICS THAT REQUIRE ACTION!**

Rethinking how we flag metrics

- Common ways of flagging metrics on that require attention on dashboards don't work!
 - “% change vs. previous period”
 - “Single-threshold”
 - “% deviation from target”
 - “Good/Satisfactory/Poor”

% deviation from target



CFO | Daily metrics for November 14, 2018

+1.0%	EBITDA (\$M's)	7.3	West Region		Southeast Region		Northeast Region				
+2.7%	Cash Flow from Fin. Activities (\$M's)	12.2	-0.3%	Vendor Expenses (\$M's)	1.1	+1.3%	EBITDA (\$M's)	1.9	+2.4%	Budget Variance	-3.2%
-4.8%	Expenses to Serve One Customer	\$828.8	+2.0%	Current Accounts Receivable (\$M's)	1.6	-2.9%	Vendor Expenses (\$M's)	0.7	+2.3%	Total Revenue (\$M's)	9.6
+5.4%	Employee satisfaction (/10)	7.1	+10.3%	COGs (\$M's)	12.1	-2.5%	Gross Margin	27.5%	-4.0%	Net Margin	11%
-3.6%	Net Margin	10.5%	+1.8%	Employee satisfaction (/10)	7.2	+0.1%	Net Margin	10.4%	-10.9%	Gross Margin	27.3%
-2.8%	Gross Margin	27.4%	+4.3%	EBITDA (\$M's)	2.8	+0.6%	Expenses to Serve One Customer	\$821.6	-4.4%	Current Accounts Payable (\$M's)	1.4
+0.8%	Operating Cash Flow (\$M's)	23.4	-2.3%	Current Ratio	1.1	+1.0%	COGs (\$M's)	8.3	+0.1%	Employee satisfaction (/10)	7.2
-14.6%	Cash on Hand (\$M's)	3.14	-3.5%	Budget Variance	-3.5%	+4.6%	Current Accounts Receivable (\$M's)	1.1	-0.8%	COGs (\$M's)	7
+2.3%	Net Working Capital (\$M's)	3.3	+0.8%	Payment Error Rate	1.8%	+3.7%	Payment Error Rate	1.7%	+3.9%	Expenses to Serve One Customer	\$863.6
+6.9%	Current Accounts Receivable (\$M's)	4.1	+1.9%	Budget Variance	1.4%	+4.8%	Training cost per employee per day	\$16.6	+4.2%	Total Expenses (\$M's)	8.3
-5.6%	Current Accounts Payable (\$M's)	6.3	+0.1%	Expenses to Serve One Customer	\$882.9	-7.0%	Employee satisfaction (/10)	7.4	+8.9%	Inventory (\$M's)	2.8
+1.8%	Invoice Processing Time	27.2 days	-4.3%	Quick Ratio	0.7	-1.8%	Total Expenses (\$M's)	9.8	+0.4%	Vendor Expenses (\$M's)	0.6
-0.9%	Accounting System Availability	99.1%	-2.4%	Inventory (\$M's)	4.9	-2.7%	Current Accounts Payable (\$M's)	1.6	-1.7%	Quick Ratio	0.7
-10.9%	Total Revenue (\$M's)	1.312					+7.8%	Inventory (\$M's)	3.3		
-3.4%	Total Expenses (\$M's)	37.6									
-5.4%	Budget Variance	-3.2%	Central Region								
+1.4%	Line Items in Budget	178 items	+4.5% Current Ratio		1.16						
-1.2%	Number of Budget Iterations	7 iterations	+8.6% Gross Margin		25.5%						
+3.3%	Payroll Staffing Ratio	32.1 emp's	+0.2% Inventory (\$M's)		1.8						
+15.3%	Vendor Expenses (\$000's)	171.4	+2.5% Quick Ratio		0.7						
-0.8%	Payment Error Rate	1.7%	+4.1% Payment Error Rate		1.8%						
-0.5%	Internal Audit Cycle Time	14.5 weeks	+3.3% Budget Variance		-2.9%						
-4.0%	Finance Error Report	37 reports	+0.8% COGs (\$M's)		1.3%						
-10.3%	Return on Equity	6.2%	-12.0% Current Accounts Payable (\$M's)		0.9						
-4.3%	Total Cost of Finance Function (\$K's)	401	+2.4% EBITDA (\$M's)		1.312						
-3.0%	Cost of Finance Function per \$1K Rev.	\$9.15	+2.3% Expenses to Serve One Customer		\$833.6						
-0.3%	Innovation Spending (\$M's)	2.851									
+1.7%	Training cost per employee per day	\$17.45									
-4.8%	Budget Variance	1.3%									
+2.5%	USD/EUR	\$1.136	Industrial B.U.		Medical B.U.		Consumer B.U.				
-3.9%	USD/YEN	\$0.009	-6.0% Total Revenue (\$M's)		11	+1.0% Net Margin		10.6%	-2.4% Net Margin		10.1%
-4.5%	USD/GBP	\$1.266	+5.0% Gross Margin		30%	-7.7% Expenses to Serve One Customer		\$907.1	-3.6% Gross Margin		25.1%
-4.4%	USD/CYN	\$0.145	+2.9% Payment Error Rate		1.6%	+4.3% Current Accounts Payable (\$M's)		0.9	-0.9% Vendor Expenses (\$M's)		1.7
-1.0%	USD/CAD	\$0.752	+2.9% Training cost per employee per day		\$17.3	-1.3% COGs (\$M's)		4.5	-6.5% Current Ratio		1.1
-11.5%	Closing price: OURCORP	\$44.21	+9.1% Inventory (\$M's)		3.2	-7.6% Budget Variance		1.3%	+3.2% Total Revenue (\$M's)		26.7
-3.7%	Closing price: COMP1	\$17.85	-8.0% Expenses to Serve One Customer		\$846.2	-3.7% Quick Ratio		0.7	+2.3% Budget Variance		-3.3%
-10.1%	Closing price: COMP2	\$93.57	-0.2% Current Accounts Payable (\$M's)		1.6	+1.3% Vendor Expenses (\$M's)		0.4	-11.5% EBITDA (\$M's)		4.5
-8.9%	Closing price: SUPPL1	\$34.5	+9.5% Net Margin		9.6%	+8.6% Inventory (\$M's)		1.8	-6.5% Training cost per employee per day		\$19.3
+4.8%	Closing price: SUPPL2	\$4.12	+4.8% Employee satisfaction (/10)		6.6	+1.8% Current Accounts Receivable (\$M's)		0.6	-0.8% Current Accounts Receivable (\$M's)		2.5
-4.2%	Closing price: PART1	\$17.01	+6.5% Budget Variance		-3.2%	+0.2% Current Ratio		1.2	+1.8% Budget Variance		1.2%
-1.8%	Closing price: PART2	\$46.57	+6.8% Quick Ratio		0.7	+1.8% Budget Variance		-3.2%	-0.7% Total Expenses (\$M's)		22.9
			+1.8% Vendor Expenses (\$M's)		0.7	-5.9% Gross Margin		27.9%			
						-1.5% Total Expenses (\$M's)		5.3			
						-0.8% EBITDA (\$M's)		1			

CFO | Daily metrics for November 14, 2018

EBITDA (\$M's)		7.3	West Region		Southeast Region		Northeast Region						
+2.7%	Cash Flow from Fin. Activities (\$M's)	12.2	Vendor Expenses (\$M's)		1.1	EBITDA (\$M's)		1.9	+2.4%	Budget Variance	-3.2%		
-4.8%	Expenses to Serve One Customer	\$828.8	Current Accounts Receivable (\$M's)		1.6	Vendor Expenses (\$M's)		0.7	+2.3%	Total Revenue (\$M's)	9.6		
+5.4%	Employee satisfaction (/10)	7.1	COGs (\$M's)		12.1	Gross Margin		27.5%	-4.0%	Net Margin	11%		
-3.6%	Net Margin	10.5%	Employee satisfaction (/10)		7.2	Net Margin		10.4%	-10.9%	Gross Margin	27.3%		
-2.8%	Gross Margin	27.4%	EBITDA (\$M's)		2.8	Expenses to Serve One Customer		\$821.6	-4.4%	Current Accounts Payable (\$M's)	1.4		
	Operating Cash Flow (\$M's)	23.4	Current Ratio		1.1	COGs (\$M's)		8.3		Employee satisfaction (/10)	7.2		
-14.6%	Cash on Hand (\$M's)	3.14	Budget Variance		-3.5%	Current Accounts Receivable (\$M's)		1.1		COGs (\$M's)	7		
						Payment Error Rate		1.7%	+3.9%	Expenses to Serve One Customer	\$863.6		
						Training cost per employee per day		\$16.6	+4.2%	Total Expenses (\$M's)	8.3		
						Employee satisfaction (/10)		7.4	+8.9%	Inventory (\$M's)	2.8		
						Total Expenses (\$M's)		9.8		Vendor Expenses (\$M's)	0.6		
						Current Accounts Payable (\$M's)		1.6		Quick Ratio	0.7		
						Inventory (\$M's)		3.3					
Invoice Processing Time		27.2 days											
Accounting System Availability		99.1%											
10.9% Total Revenue (\$M's)		1.312											
Budget Variance		-3.2%	Central Region										
	Line Items in Budget	178 items	+4.5%		Current Ratio	1.16							
	Number of Budget Iterations	7 iterations	+8.6%		Gross Margin	25.5%							
+3.3%	Payroll Staffing Ratio	32.1 emp's			Inventory (\$M's)	1.8							
-15.3%	Vendor Expenses (\$000's)	171.4	+2.5%		Quick Ratio	0.7							
	Payment Error Rate	1.7%	+4.1%		Payment Error Rate	1.8%							
	Internal Audit Cycle Time	14.5 weeks	+3.3%		Budget Variance	-2.9%							
-4.0%	Finance Error Report	37 reports			COGs (\$M's)	1.3%							
-10.3%	Return on Equity	6.2%	-12.0%		Current Accounts Payable (\$M's)	0.9							
-4.3%	Total Cost of Finance Function (\$K's)	401	+2.4%		EBITDA (\$M's)	1.312							
-3.0%	Cost of Finance Function per \$1K Rev.	\$9.15	+2.3%		Expenses to Serve One Customer	\$833.6							
	Innovation Spending (\$M's)	2.851											
	Training cost per employee per day	\$17.45											
-4.8%	Budget Variance	1.3%											
+2.5%	USD/EUR	\$1.136											
-3.9%	USD/YEN	\$0.009											
	USD/GBP	\$1.266											
-4.4%	USD/CYN	\$0.145											
	USD/CAD	\$0.752											
-11.5%	Closing price: OURCORP	\$44.21											
-3.7%	Closing price: COMP1	\$17.85											
-10.1%	Closing price: COMP2	\$93.57											
-8.9%	Closing price: SUPPL1	\$34.5											
+4.8%	Closing price: SUPPL2	\$4.12											
-4.2%	Closing price: PART1	\$17.01											
	Closing price: PART2	\$46.57											
Industrial B.U.			Medical B.U.			Consumer B.U.							
-6.0%			Total Revenue (\$M's)	11	Net Margin			10.6%	-2.4%			Net Margin	10.1%
+5.0%			Gross Margin	30%	Expenses to Serve One Customer			\$907.1	-3.6%			Gross Margin	25.1%
			Payment Error Rate	1.6%	Current Accounts Payable (\$M's)			0.9				Vendor Expenses (\$M's)	1.7
			Training cost per employee per day	\$17.3	COGs (\$M's)			4.5	-6.5%			Current Ratio	1.1
+9.1%			Inventory (\$M's)	3.2	Budget Variance			1.3%	+3.2%			Total Revenue (\$M's)	26.7
-8.0%			Expenses to Serve One Customer	\$846.2	Quick Ratio			0.7	+2.3%			Budget Variance	-3.3%
			Current Accounts Payable (\$M's)	1.6	Vendor Expenses (\$M's)			0.4	-11.5%			EBITDA (\$M's)	4.5
+9.5%			Net Margin	9.6%	Inventory (\$M's)			1.8	-6.5%			Training cost per employee per day	\$19.3
+4.8%			Employee satisfaction (/10)	6.6	Current Accounts Receivable (\$M's)			0.6				Current Accounts Receivable (\$M's)	2.5
+6.5%			Budget Variance	-3.2%	Current Ratio			1.2				Budget Variance	1.2%
+6.8%			Quick Ratio	0.7	Budget Variance			-3.2%				Total Expenses (\$M's)	22.9
			Vendor Expenses (\$M's)	0.7	Gross Margin			27.9%					
					Total Expenses (\$M's)			5.3					
					EBITDA (\$M's)			1					

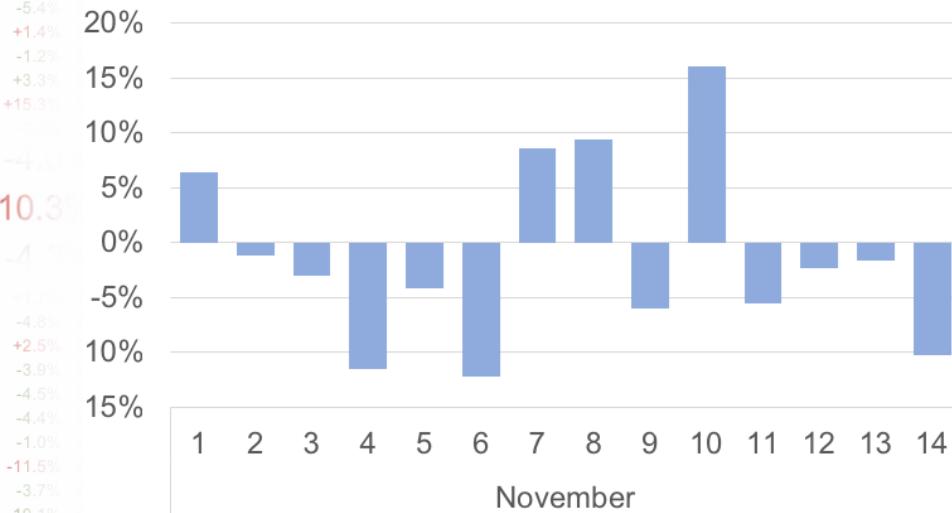
CFO | Daily metrics for November 14, 2018

+1.0%	EBITDA (\$M's)	7.3
+2.7%	Cash Flow from Fin. Activities (\$M's)	12.2
-4.8%	Expenses to Serve One Customer	\$828.8
+5.4%	Employee satisfaction (/10)	7.1
-3.6%	Net Margin	10.5%
-2.8%	Gross Margin	27.4%
+0.8%	Operating Cash Flow (\$M's)	23.4
-14.6%	Cash on Hand (\$M's)	3.14
+2.3%	Net Working Capital (\$M's)	3.3
+6.9%	Current Accounts Receivable (\$M's)	4.1
-5.6%	Current Accounts Payable (\$M's)	6.3
+1.8%	Invoice Processing Time	27.2 d
-0.9%	Accounting System Availability	99.1%

West Region	
-0.3% Vendor Expenses (\$M's)	1.1
+2.0% Current Accounts Receivable (\$M's)	1.6
+10.3% COGS (\$M's)	12.1
+1.8% Employee satisfaction (/10)	7.2
+4.3% EBITDA (\$M's)	2.8
-2.3% Current Ratio	1.1
-3.5% Budget Variance	-3.5%
+0.8% Payment Error Rate	1.8%
+1.9% Budget Variance	1.4%
+0.1% Expenses to Serve One Customer	\$882.9
-4.3% Quick Ratio	0.7
-0.4% Inventory (\$M's)	4.9

Southeast Region	
+1.3% EBITDA (\$M's)	1.9
-2.9% Vendor Expenses (\$M's)	0.7
-2.5% Gross Margin	27.5%
+0.1% Net Margin	10.4%
+0.6% Expenses to Serve One Customer	\$821.6
+1.0% COGs (\$M's)	8.3
+4.6% Current Accounts Receivable (\$M's)	1.1
+3.7% Payment Error Rate	1.7%
+4.8% Training cost per employee per day	\$16.6
-7.0% Employee satisfaction (/10)	7.4
-1.8% Total Expenses (\$M's)	9.8
-2.7% Current Accounts Payable (\$M's)	1.6
+7.8% Inventory (\$M's)	3.3

Northeast Region		
+2.4%	Budget Variance	-3.2%
+2.3%	Total Revenue (\$M's)	9.6
-4.0%	Net Margin	11%
-10.9%	Gross Margin	27.3%
-4.4%	Current Accounts Payable (\$M's)	1.4
+0.1%	Employee satisfaction (/10)	7.2
-0.8%	COGs (\$M's)	7
+3.9%	Expenses to Serve One Customer	\$863.6
+4.2%	Total Expenses (\$M's)	8.3
+8.9%	Inventory (\$M's)	2.8
+0.4%	Vendor Expenses (\$M's)	0.6
-1.7%	Quick Ratio	0.7

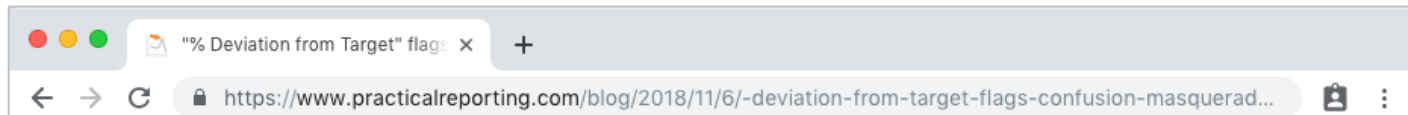


-8.9%	Closing price: SUPPL1	\$34.9
+4.8%	Closing price: SUPPL2	\$4.12
-4.2%	Closing price: PART1	\$17.01
-1.8%	Closing price: PART2	\$46.57

+4.0% Employee satisfaction (/10)	5.8
+6.5% Budget Variance	-3.2%
+6.8% Quick Ratio	0.7
+1.8% Vendor Expenses (\$M's)	0.7

Medical B.U.	
+1.0% Net Margin	10.6%
-7.7% Expenses to Serve One Customer	\$907.1
+4.3% Current Accounts Payable (\$M's)	0.97
-1.3% COGs (\$M's)	4.5
-7.6% Budget Variance	1.3%
-3.7% Quick Ratio	0.7
+1.3% Vendor Expenses (\$M's)	0.4
+8.6% Inventory (\$M's)	1.8
+1.8% Current Accounts Receivable (\$M's)	0.6
+0.2% Current Ratio	1.2
+1.8% Budget Variance	-3.2%
-5.9% Gross Margin	27.9%
-1.5% Total Expenses (\$M's)	5.3
-0.8% EBITDA (\$M's)	1

Consumer B.U.	
-2.4% Net Margin	10.1%
-3.6% Gross Margin	25.1%
-0.9% Vendor Expenses (\$M's)	1.7
-6.5% Current Ratio	1.1
+3.2% Total Revenue (\$M's)	26.7
+2.3% Budget Variance	-3.3%
-11.5% EBITDA (\$M's)	4.5
-6.5% Training cost per employee per day	\$19.3
-0.8% Current Accounts Receivable (\$M's)	2.5
+1.8% Budget Variance	1.2%
-0.7% Total Expenses (\$M's)	22.9



SERVICES BLOG UPCOMING BOOK! ABOUT CONTACT/FOLLOW

"% Deviation From Target" Flags: Confusion Masquerading As Context (Book Excerpt)

November 6, 2018

tl;dr: This excerpt from my upcoming book, [Beyond Dashboards](#), is the fifth in an eight-part series on determining which metrics to visually flag on a dashboard (i.e., with alert dots, different-colored text, etc.) in order to draw attention to metrics that require it. In this post, I look at what I call the "% deviation from target" method of flagging metrics on a dashboard. I explain why, despite seeming like an improvement upon [single-threshold flags](#), and being used on many dashboards, "% deviation from target" flags can easily mislead. In a later post in this series, I'll introduce a more useful way to flag metrics on dashboards called the ["four-threshold" method](#).

One of the most common ways to flag dashboard metrics that require attention is the "% deviation from target" method, whereby a percentage deviation from each metric's target value is shown beside its current value:

		vs. target
Revenue	\$745,121	▲ 3.8%
Profit	\$87,179	▲ 9.6%
Average order size	\$71.31	▼ 4.5%

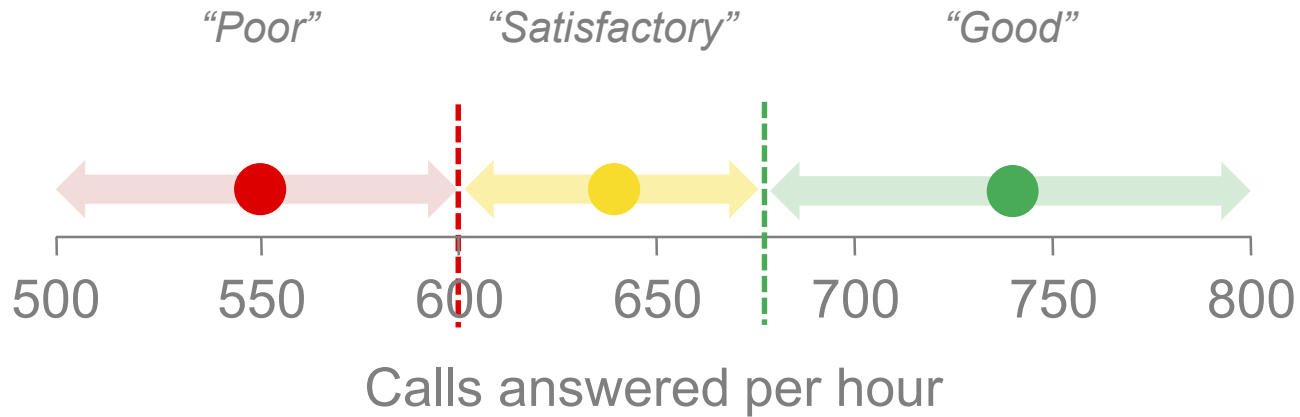
With “% deviation from target” flags...

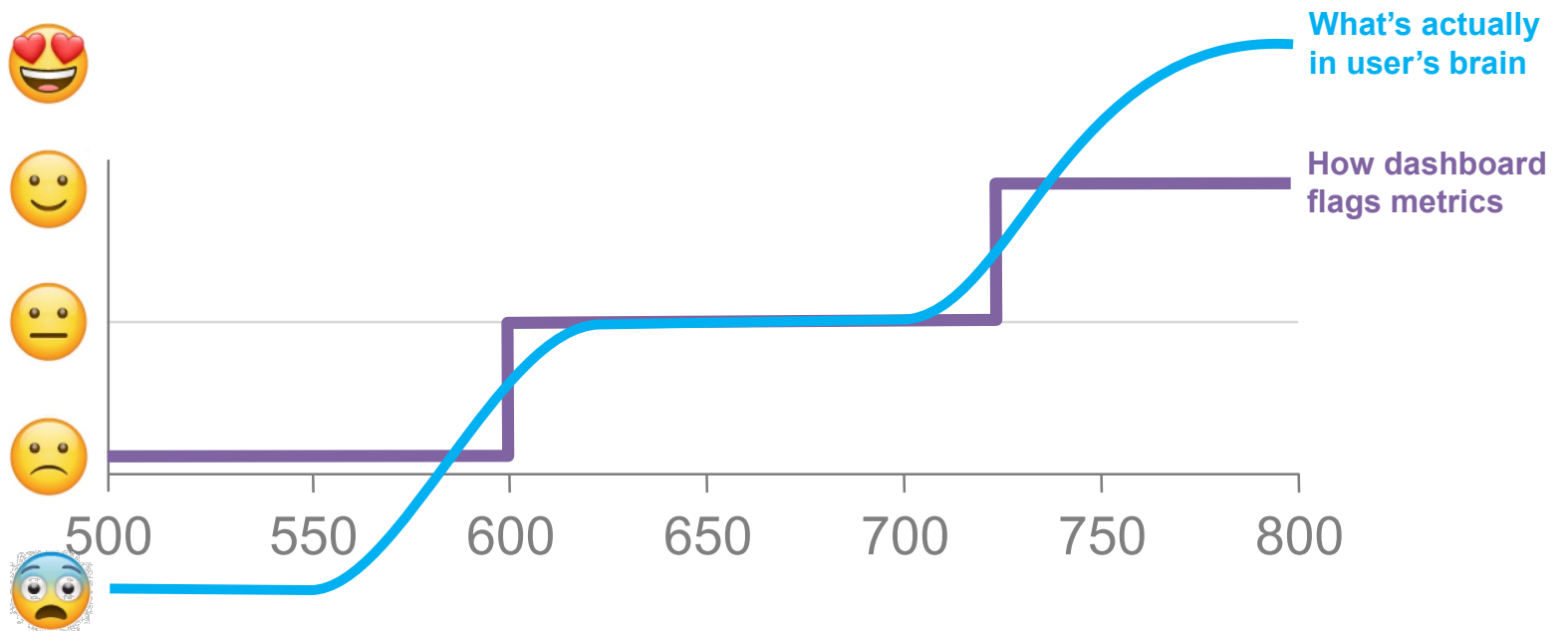
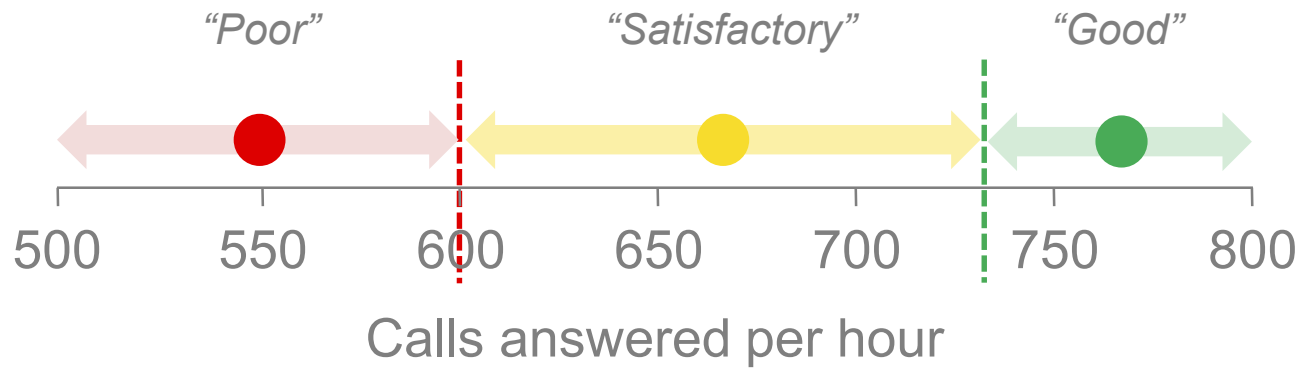
- A small % deviation from target may or may not indicate a metric that requires action.
- A big % deviation from target may or may not indicate a metric that requires action.
- Sudden dips and spikes may or may not get flagged.
- Hard for users to set.
- **NOT A GOOD WAY TO IDENTIFY METRICS THAT REQUIRE ACTION!**

Rethinking how we flag metrics

- Common ways of flagging metrics on that require attention on dashboards don't work!
 - “% change vs. previous period”
 - “Single-threshold”
 - “% deviation from target”
 - “Good/Satisfactory/Poor”

Good/Satisfactory/Poor ranges

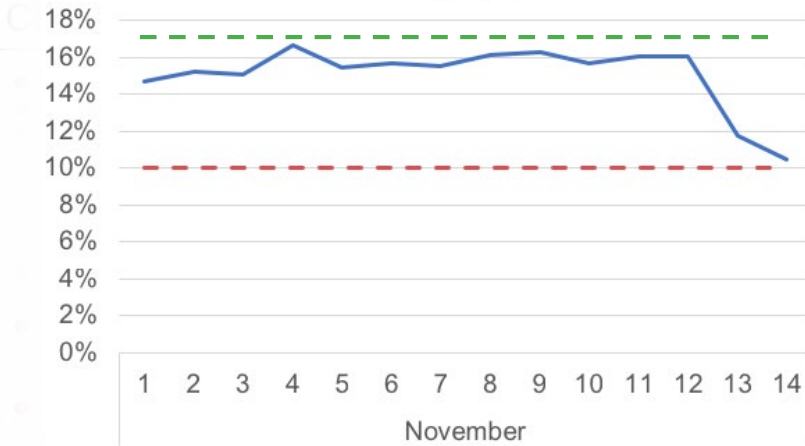




CFO | Daily metrics for November 14, 2018

<div><div></div><div>EBITDA (\$M's)</div><div>7.3</div></div> <div><div></div><div>Cash Flow from Fin. Activities (\$M's)</div><div>12.2</div></div> <div><div></div><div>Expenses to Serve One Customer</div><div>\$828.8</div></div> <div><div></div><div>Employee satisfaction (/10)</div><div>7.1</div></div> <div><div></div><div>Net Margin</div><div>10.5%</div></div> <div><div></div><div>Gross Margin</div><div>27.4%</div></div> <div><div></div><div>Operating Cash Flow (\$M's)</div><div>23.4</div></div> <div><div></div><div>Cash on Hand (\$M's)</div><div>3.14</div></div> <div><div></div><div>Net Working Capital (\$M's)</div><div>3.3</div></div> <div><div></div><div>Current Accounts Receivable (\$M's)</div><div>4.1</div></div> <div><div></div><div>Current Accounts Payable (\$M's)</div><div>6.3</div></div> <div><div></div><div>Invoice Processing Time</div><div>27.2 days</div></div> <div><div></div><div>Accounting System Availability</div><div>99.1%</div></div> <div><div></div><div>Total Revenue (\$M's)</div><div>1.312</div></div> <div><div></div><div>Total Expenses (\$M's)</div><div>37.6</div></div> <div><div></div><div>Budget Variance</div><div>-3.2%</div></div> <div><div></div><div>Line Items in Budget</div><div>178 items</div></div> <div><div></div><div>Number of Budget Iterations</div><div>7 iterations</div></div> <div><div></div><div>Payroll Staffing Ratio</div><div>32.1 emp's</div></div> <div><div></div><div>Vendor Expenses (\$000's)</div><div>171.4</div></div> <div><div></div><div>Payment Error Rate</div><div>1.7%</div></div> <div><div></div><div>Internal Audit Cycle Time</div><div>14.5 weeks</div></div> <div><div></div><div>Finance Error Report</div><div>37 reports</div></div> <div><div></div><div>Return on Equity</div><div>6.2%</div></div> <div><div></div><div>Total Cost of Finance Function (\$K's)</div><div>401</div></div> <div><div></div><div>Cost of Finance Function per \$1K Rev.</div><div>\$9.15</div></div> <div><div></div><div>Innovation Spending (\$M's)</div><div>2.851</div></div> <div><div></div><div>Training cost per employee per day</div><div>\$17.45</div></div> <div><div></div><div>Budget Variance</div><div>1.3%</div></div> <div><div></div><div>USD/EUR</div><div>\$1.136</div></div> <div><div></div><div>USD/YEN</div><div>\$0.009</div></div> <div><div></div><div>USD/GBP</div><div>\$1.266</div></div> <div><div></div><div>USD/CYN</div><div>\$0.145</div></div> <div><div></div><div>USD/CAD</div><div>\$0.752</div></div> <div><div></div><div>Closing price: OURCORP</div><div>\$44.21</div></div> <div><div></div><div>Closing price: COMP1</div><div>\$17.85</div></div> <div><div></div><div>Closing price: COMP2</div><div>\$93.57</div></div> <div><div></div><div>Closing price: SUPPL1</div><div>\$34.5</div></div> <div><div></div><div>Closing price: SUPPL2</div><div>\$4.12</div></div> <div><div></div><div>Closing price: PART1</div><div>\$17.01</div></div> <div><div></div><div>Closing price: PART2</div><div>\$46.57</div></div>	<div><div>West Region</div><div><div></div><div>Vendor Expenses (\$M's)</div><div>1.1</div></div><div><div></div><div>Current Accounts Receivable (\$M's)</div><div>1.6</div></div><div><div></div><div>COGs (\$M's)</div><div>12.1</div></div><div><div></div><div>Employee satisfaction (/10)</div><div>7.2</div></div><div><div></div><div>EBITDA (\$M's)</div><div>2.8</div></div><div><div></div><div>Current Ratio</div><div>1.1</div></div><div><div></div><div>Budget Variance</div><div>-3.5%</div></div><div><div></div><div>Payment Error Rate</div><div>1.8%</div></div><div><div></div><div>Budget Variance</div><div>1.4%</div></div><div><div></div><div>Expenses to Serve One Customer</div><div>\$882.9</div></div><div><div></div><div>Quick Ratio</div><div>0.7</div></div><div><div></div><div>Inventory (\$M's)</div><div>4.9</div></div></div> <div><div>Central Region</div><div><div></div><div>Current Ratio</div><div>1.16</div></div><div><div></div><div>Gross Margin</div><div>25.5%</div></div><div><div></div><div>Inventory (\$M's)</div><div>1.8</div></div><div><div></div><div>Quick Ratio</div><div>0.7</div></div><div><div></div><div>Payment Error Rate</div><div>1.8%</div></div><div><div></div><div>Budget Variance</div><div>-2.9%</div></div><div><div></div><div>COGs (\$M's)</div><div>1.3%</div></div><div><div></div><div>Current Accounts Payable (\$M's)</div><div>0.9</div></div><div><div></div><div>EBITDA (\$M's)</div><div>1.312</div></div><div><div></div><div>Expenses to Serve One Customer</div><div>\$833.6</div></div></div>	<div><div>Southeast Region</div><div><div></div><div>EBITDA (\$M's)</div><div>1.9</div></div><div><div></div><div>Vendor Expenses (\$M's)</div><div>0.7</div></div><div><div></div><div>Gross Margin</div><div>27.5%</div></div><div><div></div><div>Net Margin</div><div>10.4%</div></div><div><div></div><div>Expenses to Serve One Customer</div><div>\$821.6</div></div><div><div></div><div>COGs (\$M's)</div><div>8.3</div></div><div><div></div><div>Current Accounts Receivable (\$M's)</div><div>1.1</div></div><div><div></div><div>Payment Error Rate</div><div>1.7%</div></div><div><div></div><div>Training cost per employee per day</div><div>\$16.6</div></div><div><div></div><div>Employee satisfaction (/10)</div><div>7.4</div></div><div><div></div><div>Total Expenses (\$M's)</div><div>9.8</div></div><div><div></div><div>Current Accounts Payable (\$M's)</div><div>1.6</div></div><div><div></div><div>Inventory (\$M's)</div><div>3.3</div></div></div>	<div><div>Northeast Region</div><div><div></div><div>Budget Variance</div><div>-3.2%</div></div><div><div></div><div>Total Revenue (\$M's)</div><div>9.6</div></div><div><div></div><div>Net Margin</div><div>11%</div></div><div><div></div><div>Gross Margin</div><div>27.3%</div></div><div><div></div><div>Current Accounts Payable (\$M's)</div><div>1.4</div></div><div><div></div><div>Employee satisfaction (/10)</div><div>7.2</div></div><div><div></div><div>COGs (\$M's)</div><div>7</div></div><div><div></div><div>Expenses to Serve One Customer</div><div>\$863.6</div></div><div><div></div><div>Total Expenses (\$M's)</div><div>8.3</div></div><div><div></div><div>Inventory (\$M's)</div><div>2.8</div></div><div><div></div><div>Vendor Expenses (\$M's)</div><div>0.6</div></div><div><div></div><div>Quick Ratio</div><div>0.7</div></div></div>
	<div><div>Industrial B.U.</div><div><div></div><div>Total Revenue (\$M's)</div><div>11</div></div><div><div></div><div>Gross Margin</div><div>30%</div></div><div><div></div><div>Payment Error Rate</div><div>1.6%</div></div><div><div></div><div>Training cost per employee per day</div><div>\$17.3</div></div><div><div></div><div>Inventory (\$M's)</div><div>3.2</div></div><div><div></div><div>Expenses to Serve One Customer</div><div>\$846.2</div></div><div><div></div><div>Current Accounts Payable (\$M's)</div><div>1.6</div></div><div><div></div><div>Net Margin</div><div>9.6%</div></div><div><div></div><div>Employee satisfaction (/10)</div><div>6.6</div></div><div><div></div><div>Budget Variance</div><div>-3.2%</div></div><div><div></div><div>Quick Ratio</div><div>0.7</div></div><div><div></div><div>Vendor Expenses (\$M's)</div><div>0.7</div></div></div>	<div><div>Medical B.U.</div><div><div></div><div>Net Margin</div><div>10.6%</div></div><div><div></div><div>Expenses to Serve One Customer</div><div>\$907.1</div></div><div><div></div><div>Current Accounts Payable (\$M's)</div><div>0.9</div></div><div><div></div><div>COGs (\$M's)</div><div>4.5</div></div><div><div></div><div>Budget Variance</div><div>1.3%</div></div><div><div></div><div>Quick Ratio</div><div>0.7</div></div><div><div></div><div>Vendor Expenses (\$M's)</div><div>0.4</div></div><div><div></div><div>Inventory (\$M's)</div><div>1.8</div></div><div><div></div><div>Current Accounts Receivable (\$M's)</div><div>0.6</div></div><div><div></div><div>Current Ratio</div><div>1.2</div></div><div><div></div><div>Budget Variance</div><div>-3.2%</div></div><div><div></div><div>Gross Margin</div><div>27.9%</div></div><div><div></div><div>Total Expenses (\$M's)</div><div>5.3</div></div><div><div></div><div>EBITDA (\$M's)</div><div>1</div></div></div>	<div><div>Consumer B.U.</div><div><div></div><div>Net Margin</div><div>10.1%</div></div><div><div></div><div>Gross Margin</div><div>25.1%</div></div><div><div></div><div>Vendor Expenses (\$M's)</div><div>1.7</div></div><div><div></div><div>Current Ratio</div><div>1.1</div></div><div><div></div><div>Total Revenue (\$M's)</div><div>26.7</div></div><div><div></div><div>Budget Variance</div><div>-3.3%</div></div><div><div></div><div>EBITDA (\$M's)</div><div>4.5</div></div><div><div></div><div>Training cost per employee per day</div><div>\$19.3</div></div><div><div></div><div>Current Accounts Receivable (\$M's)</div><div>2.5</div></div><div><div></div><div>Budget Variance</div><div>1.2%</div></div><div><div></div><div>Total Expenses (\$M's)</div><div>22.9</div></div></div>

Net Margin (%)



Total Expenses (\$M's)	\$171.4
Budget Variance	-3.2%
Line Items in Budget	178 items
Number of Budget Iterations	7 iterations
Payroll Staffing Ratio	32.1 emp's
Vendor Expenses (\$1000's)	171.4
Payment Error Rate	1.7%
Internal Audit Cycle Time	14.5 weeks
Finance Error Report	37 reports
Return on Equity	6.2%
Total Cost of Finance Function (\$K's)	401
Cost of Finance Function per \$1K Rev.	\$9.15
Innovation Spending (\$M's)	2.851
Training cost per employee per day	\$17.45
Budget Variance	1.3%
USD/EUR	\$1.136
USD/YEN	\$0.009
USD/GBP	\$1.266
USD/CYN	\$0.145
USD/CAD	\$0.752
Closing price: OURCORP	\$44.21
Closing price: COMP1	\$17.85
Closing price: COMP2	\$93.57
Closing price: SUPPL1	\$34.5
Closing price: SUPPL2	\$4.12
Closing price: PART1	\$17.01
Closing price: PART2	\$46.57

Central Region

Current Ratio	1.16
Gross Margin	25.5%
Inventory (\$M's)	1.8
Quick Ratio	0.7
Payment Error Rate	1.8%
Budget Variance	-2.9%
COGs (\$M's)	1.3%
Current Accounts Payable (\$M's)	0.9
EBITDA (\$M's)	1.312
Expenses to Serve One Customer	\$833.6

Industrial B.U.

Total Revenue (\$M's)	11
Gross Margin	30%
Payment Error Rate	1.6%
Training cost per employee per day	\$17.3
Inventory (\$M's)	3.2
Expenses to Serve One Customer	\$846.2
Current Accounts Payable (\$M's)	1.6
Net Margin	9.6%
Employee satisfaction (/10)	6.6
Budget Variance	-3.2%
Quick Ratio	0.7
Vendor Expenses (\$M's)	0.7

Southeast Region

EBITDA (\$M's)	1.9
Vendor Expenses (\$M's)	0.7
Gross Margin	27.5%
Net Margin	10.4%
Expenses to Serve One Customer	\$821.6
COGs (\$M's)	8.3
Current Accounts Receivable (\$M's)	1.1
Payment Error Rate	1.7%
Training cost per employee per day	\$16.6
Employee satisfaction (/10)	7.4
Total Expenses (\$M's)	9.8
Current Accounts Payable (\$M's)	1.6
Inventory (\$M's)	3.3

Northeast Region

Budget Variance	-3.2%
Total Revenue (\$M's)	9.6
Net Margin	11%
Gross Margin	27.3%
Current Accounts Payable (\$M's)	1.4
Employee satisfaction (/10)	7.2
COGs (\$M's)	7
Expenses to Serve One Customer	\$863.6
Total Expenses (\$M's)	8.3
Inventory (\$M's)	2.8
Vendor Expenses (\$M's)	0.6
Quick Ratio	0.7

Medical B.U.

Net Margin	10.6%
Expenses to Serve One Customer	\$907.1
Current Accounts Payable (\$M's)	0.9
COGs (\$M's)	4.5
Budget Variance	1.3%
Quick Ratio	0.7
Vendor Expenses (\$M's)	0.4
Inventory (\$M's)	1.8
Current Accounts Receivable (\$M's)	0.6
Current Ratio	1.2
Budget Variance	-3.2%
Gross Margin	27.9%
Total Expenses (\$M's)	5.3
EBITDA (\$M's)	1

Consumer B.U.

Net Margin	10.1%
Gross Margin	25.1%
Vendor Expenses (\$M's)	1.7
Current Ratio	1.1
Total Revenue (\$M's)	26.7
Budget Variance	-3.3%
EBITDA (\$M's)	4.5
Training cost per employee per day	\$19.3
Current Accounts Receivable (\$M's)	2.5
Budget Variance	1.2%
Total Expenses (\$M's)	22.9

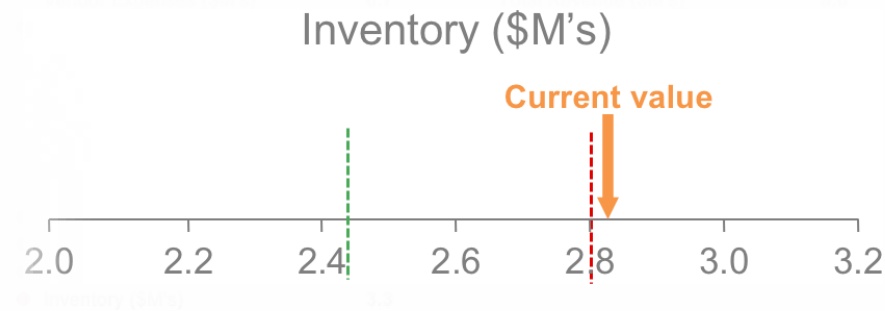
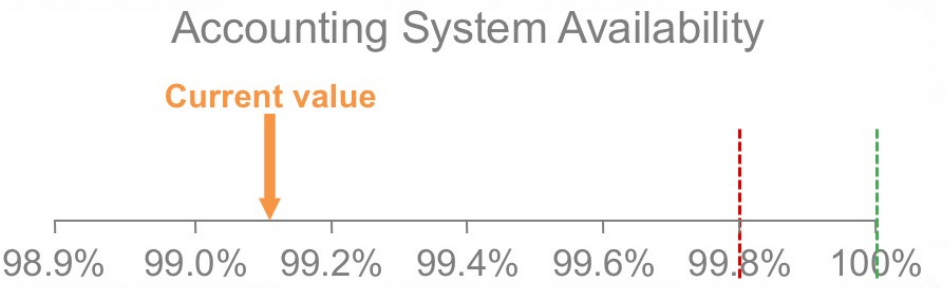
CFO | Daily metrics for November 14, 2018

EBITDA (\$M's)	7.3
Cash Flow from Fin. Activities (\$M's)	12.2
Expenses to Serve One Customer	\$828.8
Employee satisfaction (/10)	7.1
Net Margin	10.5%
Gross Margin	27.4%
Operating Cash Flow (\$M's)	23.4

West Region	
Vendor Expenses (\$M's)	1.1
Current Accounts Receivable (\$M's)	1.6
COGs (\$M's)	12.1
Employee satisfaction (/10)	7.2
EBITDA (\$M's)	2.8
Current Ratio	1.1

Southeast Region	
EBITDA (\$M's)	1.9
Vendor Expenses (\$M's)	0.7

Northeast Region	
Budget Variance	-3.2%
Total Revenue (\$M's)	0.8



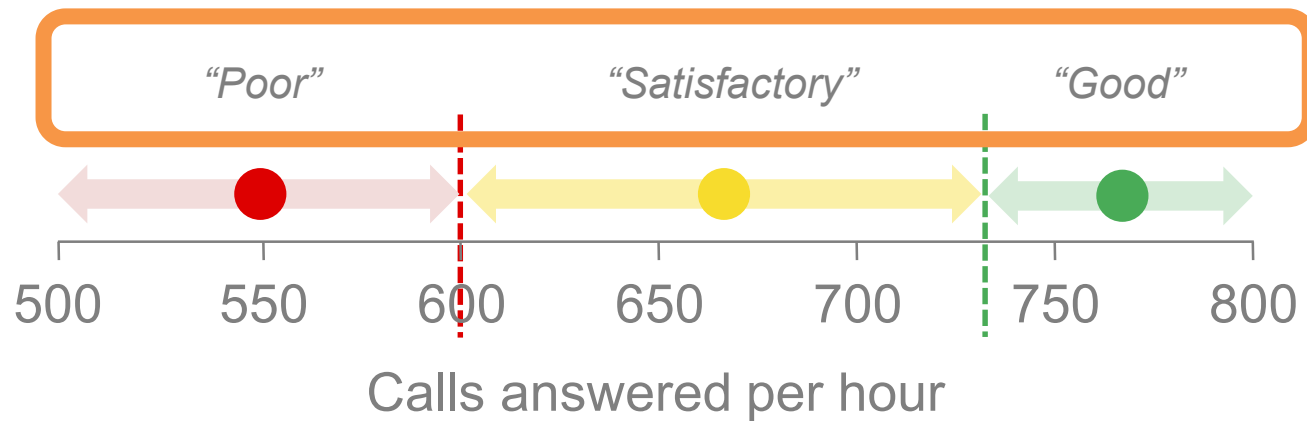
Inventory (\$M's)	1.8
Quick Ratio	0.7
Payment Error Rate	1.8%
Budget Variance	-2.9%
COGs (\$M's)	1.3%
Current Accounts Payable (\$M's)	0.9
EBITDA (\$M's)	1.312
Expenses to Serve One Customer	\$833.6

Industrial B.U.	
Total Revenue (\$M's)	11
Gross Margin	30%
Payment Error Rate	1.6%
Training cost per employee per day	\$17.3
Inventory (\$M's)	3.2
Expenses to Serve One Customer	\$846.2
Current Accounts Payable (\$M's)	1.6
Net Margin	9.6%
Employee satisfaction (/10)	6.6
Budget Variance	-3.2%
Quick Ratio	0.7
Vendor Expenses (\$M's)	0.7

Medical B.U.	
Net Margin	10.6%
Expenses to Serve One Customer	\$907.1
Current Accounts Payable (\$M's)	0.9
COGs (\$M's)	4.5
Budget Variance	1.3%
Quick Ratio	0.7
Vendor Expenses (\$M's)	0.4
Inventory (\$M's)	1.8
Current Accounts Receivable (\$M's)	0.6
Current Ratio	1.2
Budget Variance	-3.2%
Gross Margin	27.9%
Total Expenses (\$M's)	5.3
EBITDA (\$M's)	1

Consumer B.U.	
Net Margin	10.1%
Gross Margin	25.1%
Vendor Expenses (\$M's)	1.7
Current Ratio	1.1
Total Revenue (\$M's)	26.7
Budget Variance	-3.3%
EBITDA (\$M's)	4.5
Training cost per employee per day	\$19.3
Current Accounts Receivable (\$M's)	2.5
Budget Variance	1.2%
Total Expenses (\$M's)	22.9

Ambiguous terms




Good/Satisfactory/Poor ranges x

+

← → ↻

https://www.practicalreporting.com/blog/2018/11/12/goodsatisfactorypoor-ranges-on-dashboards-not...

Practical
Reporting
Inc.



SERVICES

BLOG

2019 BOOK!

ABOUT

CONTACT/FOLLOW

Good/Satisfactory/Poor Ranges On Dashboards: Not As Effective As They Seem

November 13, 2018

tl;dr: This excerpt from my upcoming book, [Beyond Dashboards](#), is the fifth in a seven-part series on how to determine which metrics to visually flag on a dashboard (i.e., with alert dots, different-colored text, etc.) in order to draw attention to metrics that require it. In this post, I look at the “Good/Satisfactory/Poor” method used on many dashboards. While not as problematic as the “[vs. previous period](#)” or “[single-threshold](#)” methods that I discussed in previous posts, this method still has several serious drawbacks that become obvious when pointed out. In the next post in this series, I’ll introduce a more useful approach called “[four-threshold](#)” visual flags.

One of the most common ways to determine which metrics to visually flag on a dashboard is to define “Good,” “Satisfactory” and “Poor” ranges for each metric, and then flag metrics that currently fall into their respective “Good” or “Poor” ranges:

Revenue	\$745,121
● Profit	\$87,179
Average order size	\$71.31
● Customer lifetime value	70.0%

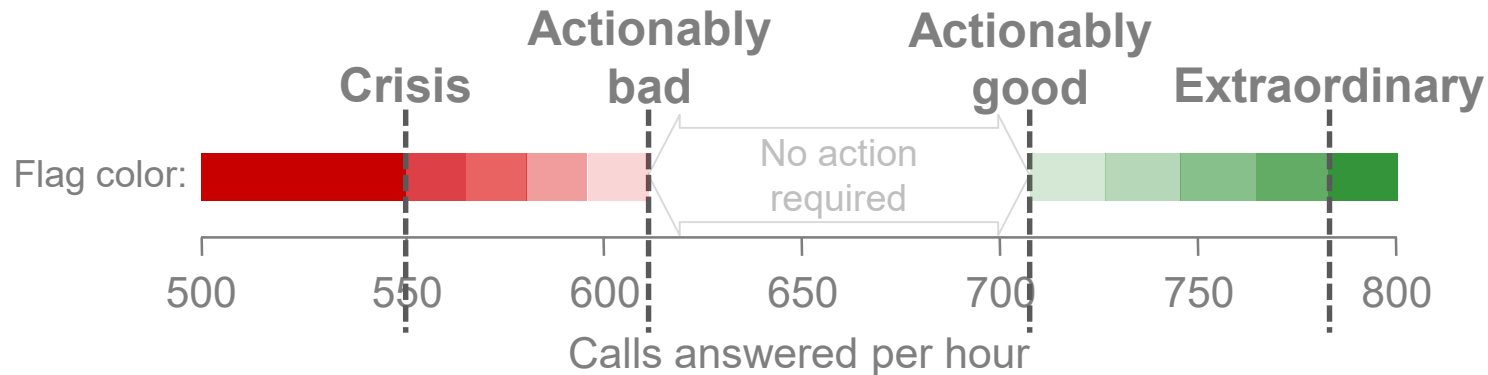
With “good/satisfactory/poor” flags...

- Ambiguous: Hard to set, hard to interpret.
- Minor issues look the same as crises.
- Metrics that are doing modestly well look the same as those that are doing extraordinarily well.
- Sudden dips, spikes, etc. are often not flagged.
- **NOT A GOOD WAY TO IDENTIFY METRICS THAT REQUIRE ACTION!**

Rethinking how we flag metrics

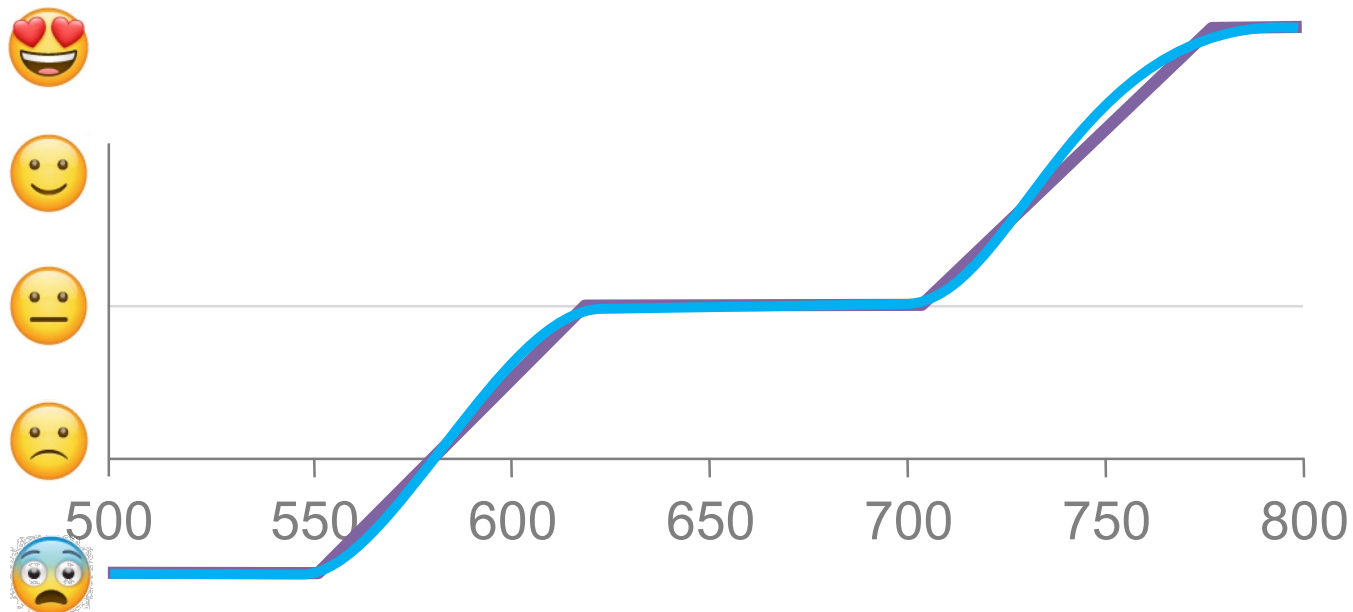
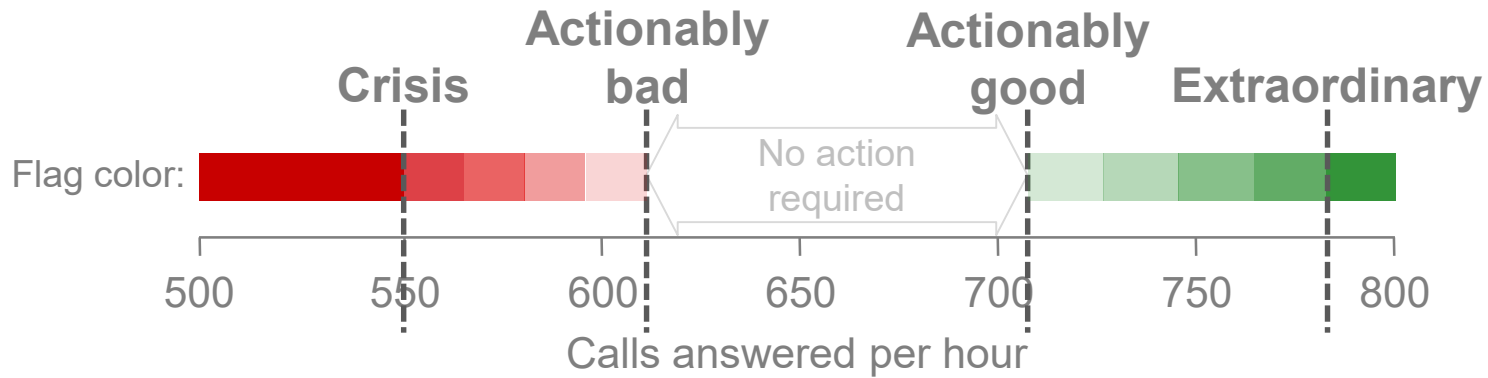
- Common ways of flagging metrics on dashboards:
 - ✗ “% change vs. previous period”
 - ✗ “Single-threshold”
 - ✗ “% deviation from target”
 - ✗ “Good/Satisfactory/Poor”
 - “The four-threshold method”

The “four-threshold” method



- **Crisis:** The point at which improving the metric would become the user’s top and possibly only priority
- **Actionably Bad:** The point at which the metric would be *just* bad enough that the user would actually do something about it
- **Actionably Good:** The point at which the metric would be *just* good enough that the user would actually do something about it
- **Extraordinary:** The point at which the metric would exceed the user’s most optimistic expectations

The “four-threshold” method

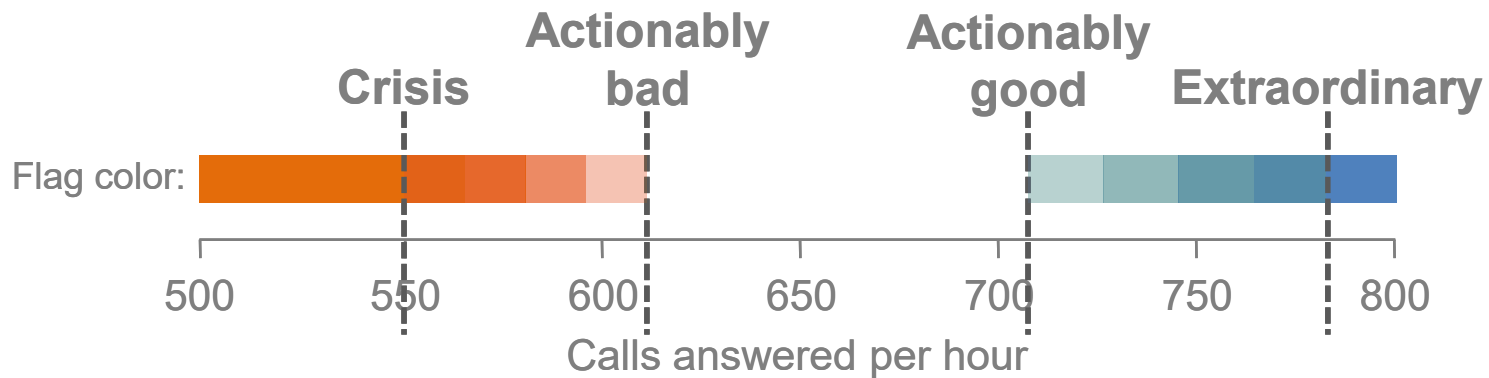


An Organization Inc. | CEO | Daily Metrics for November 14, 2018

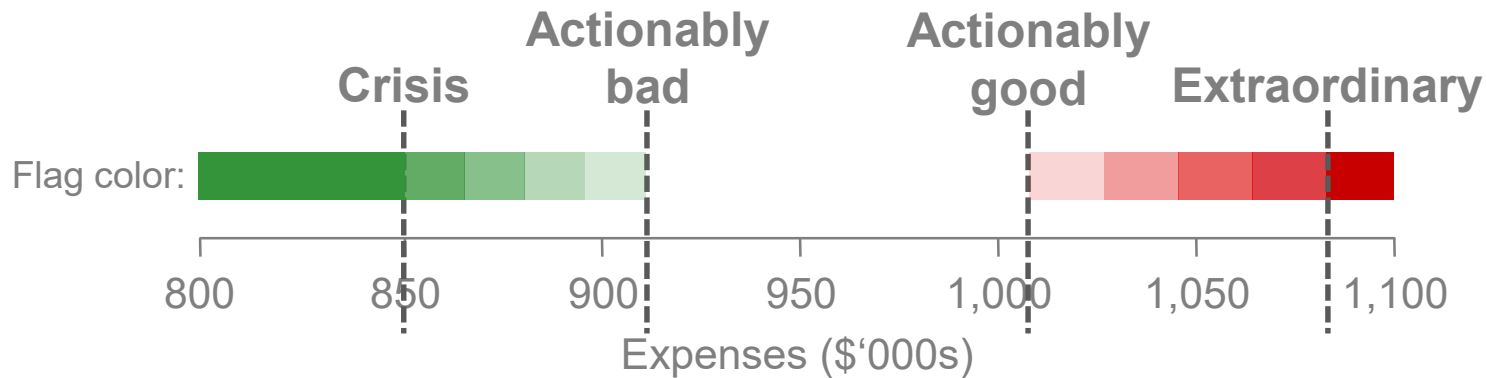
Key metrics		Regions			
Expenses per	100 \$'000s	Americas		Europe & Africa	
Per of investment	676 units	Headcount revenue number	784 tickets	Investment return on at total headcount	361 %
At of revenue total	1 \$B	Revenue revenue expenses risk risk expenses cost	81 \$	Number per revenue	9 \$
On number project total	529 tickets	At cost cost project cost	729 tickets	Of per investment expenses	100 \$
At operational total	676 \$	Of per at on expenses project	1,681 \$	Number operational on	1,024 \$
Revenue project investment expenses	225 %	Cost expenses	400 tickets	Investment risk	1,600 \$
Number investment number	1,225 \$B	Number at	1,521 '000s of units	Investment operational per	529 employees
Per	289 employees	Number expenses total on return on of	25 units	Investment per	25 \$M
Headcount cost cost at	9 projects	Project	676 tickets	Headcount	2,304 \$M
Expenses on expenses	900 %	Project operational	1,024 \$M		
Risk total total	144 projects	At total of	1 projects		
				Asia	
				On of investment	900 %
				Revenue cost revenue	625 units
				Cost	1,089 units
				Return project	225 tickets
				Headcount on revenue number project risk	900 employees
				At at number revenue project	1,296 %
				Operational	1,764 projects
				Expenses number headcount return	324 %
				Of operational project expenses	900 \$M
				Of risk at	1,024 \$M
				Number revenue expenses number of risk	2,025 tickets
Departments					
Sales		Marketing		Operations and IT	
Number number risk	16 \$	At operational operational	2,209 \$	Return	576 %
Number total project risk	4 \$	Project risk operational	961 tickets	Total per on operational total	9 tickets
Per on risk	64 employees	Headcount	81 %	At cost investment risk of of	144 units
Return risk on	1,369 \$M	Per per return	4 '000s of units	Return	1,156 \$
Expenses investment	169 %	Of total per	1,521 \$M	Risk project operational	1,849 \$M
Operational expenses expenses	49 %	Return	1,681 %	At project expenses	961 %
Headcount number headcount revenue	2,116 \$	Return return	729 units	On number return	784 %
		Headcount expenses cost	169 '000s of units	Expenses	144 units
		Revenue total number number risk return total	225 \$M	Investment risk	625 %
		Of on return cost expenses of	1 \$B	Return project risk	784 \$
				Revenue on risk	1,849 units
Manufacturing		Human resources		Finance and admin	
At cost on	9 employees	Revenue at number	361 employees	Risk investment	1,024 \$B
Investment risk	1 \$'000s	Per cost of revenue	49 \$B	Number return	289 %
Operational	400 \$	Investment operational return on	1,225 \$B	Total of number return cost revenue per	900 units
Number on number total	729 tickets	At risk operational	256 %	Risk expenses	1,156 %
Project at per	1,369 \$	Revenue expenses project expenses	676 \$M	Total total total expenses	1,369 \$B
Operational	2,025 tickets	Project headcount revenue	2,401 \$	Cost per	1,600 units
Number return revenue project risk on	1,024 \$	Operational expenses risk investment	196 %	Headcount total	1,600 units
On per operational	2,116 %			Cost total on of	81 \$
Expenses at investment	841 projects			Number total	1,681 \$B
Investment total at	36 \$B			Operational operational	441 \$
Per	1,849 %				

Color blindness

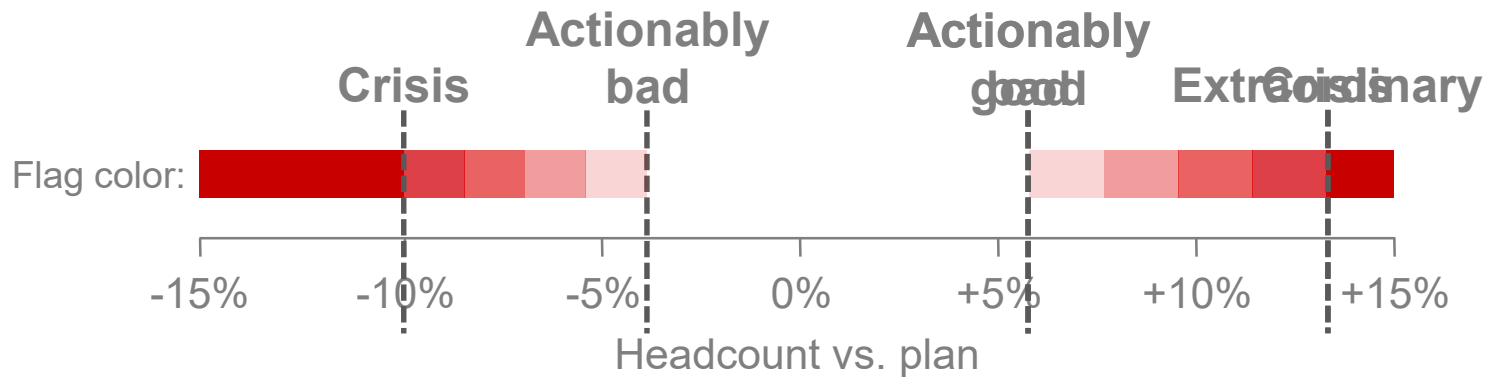
☒ Use color blind-friendly colors



“Lower is better” metrics



“Goldilocks” metrics



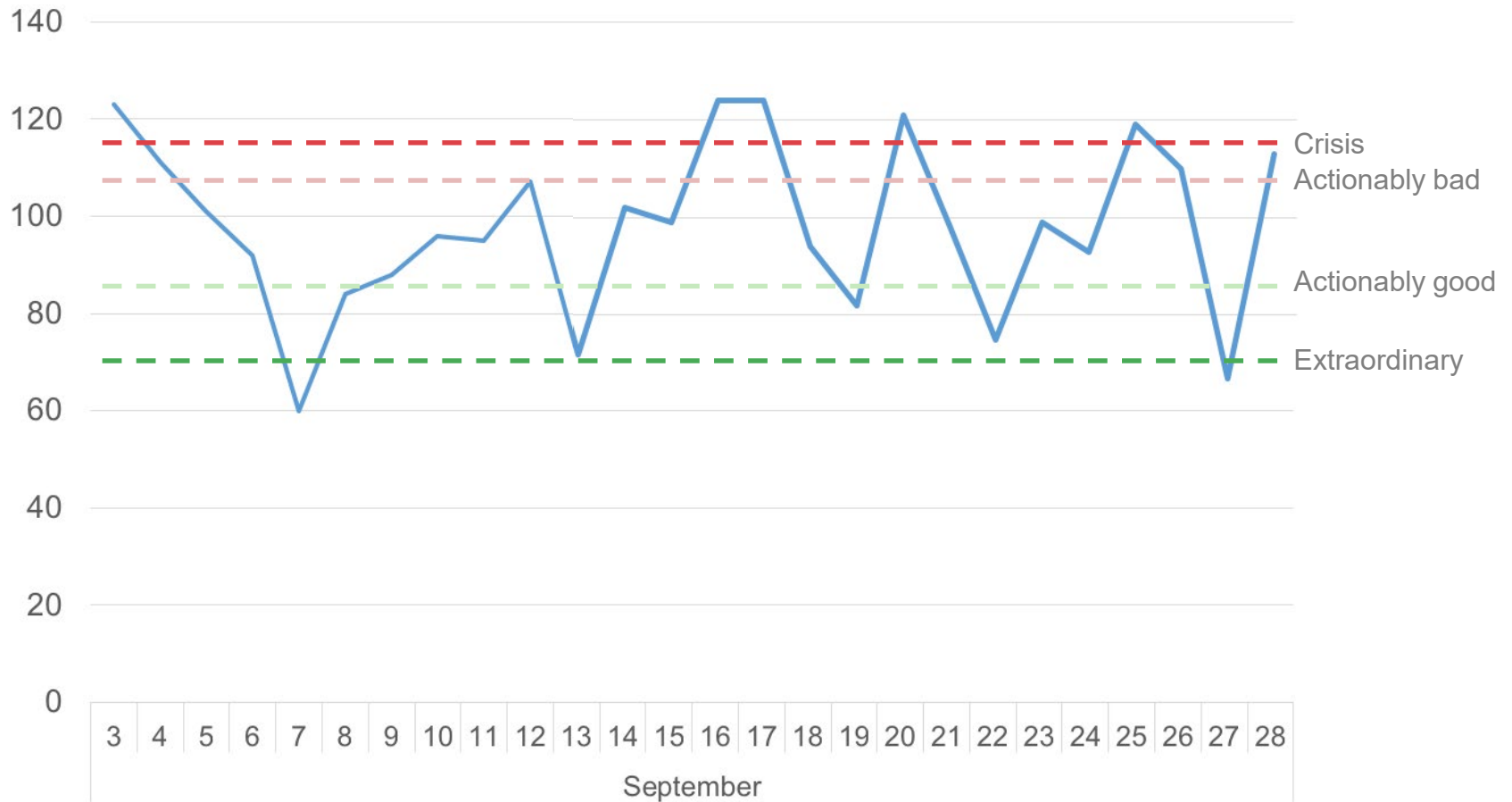
Automatically detecting metrics that require action

- The solution: A combination of approaches...
 - ✓ 1. Rethink how we flag metrics that require action
 2. Set flagging thresholds manually for key metrics (but informed by statistical analysis)
 3. Set alert conditions automatically (using statistics) for “non-key” metrics

Setting alert thresholds manually

- Key challenges:
 - Users not familiar with metric, don't know where to set alert thresholds
 - Users tend to set alert thresholds that are too “sensitive”, so normal, random fluctuations that require no action get flagged as requiring action.

Manufacturing Defects Per Day



Statistical Process Control (SPC)

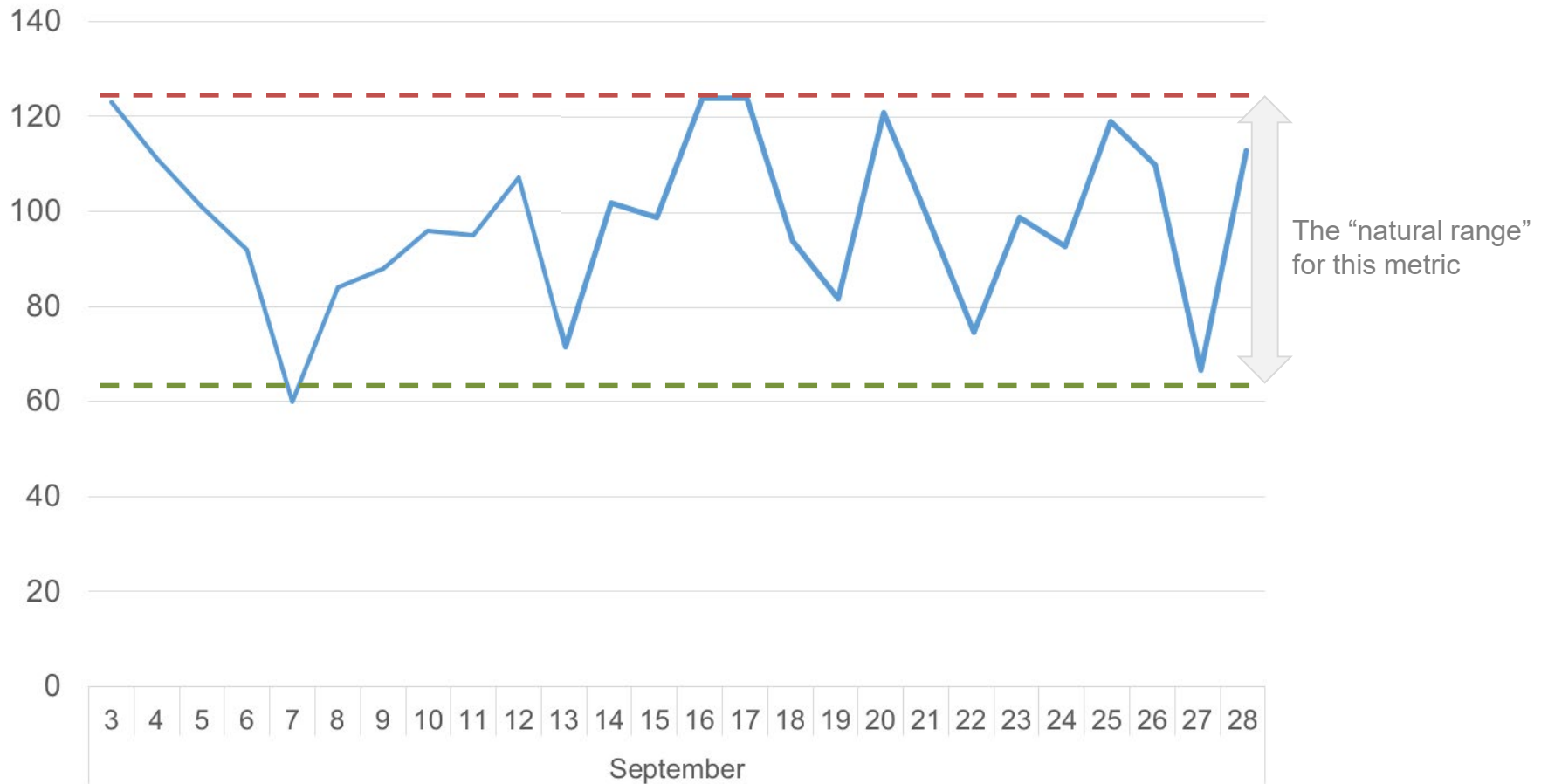


Walter A. Shewhart (1891 – 1967)

The father of statistical quality control



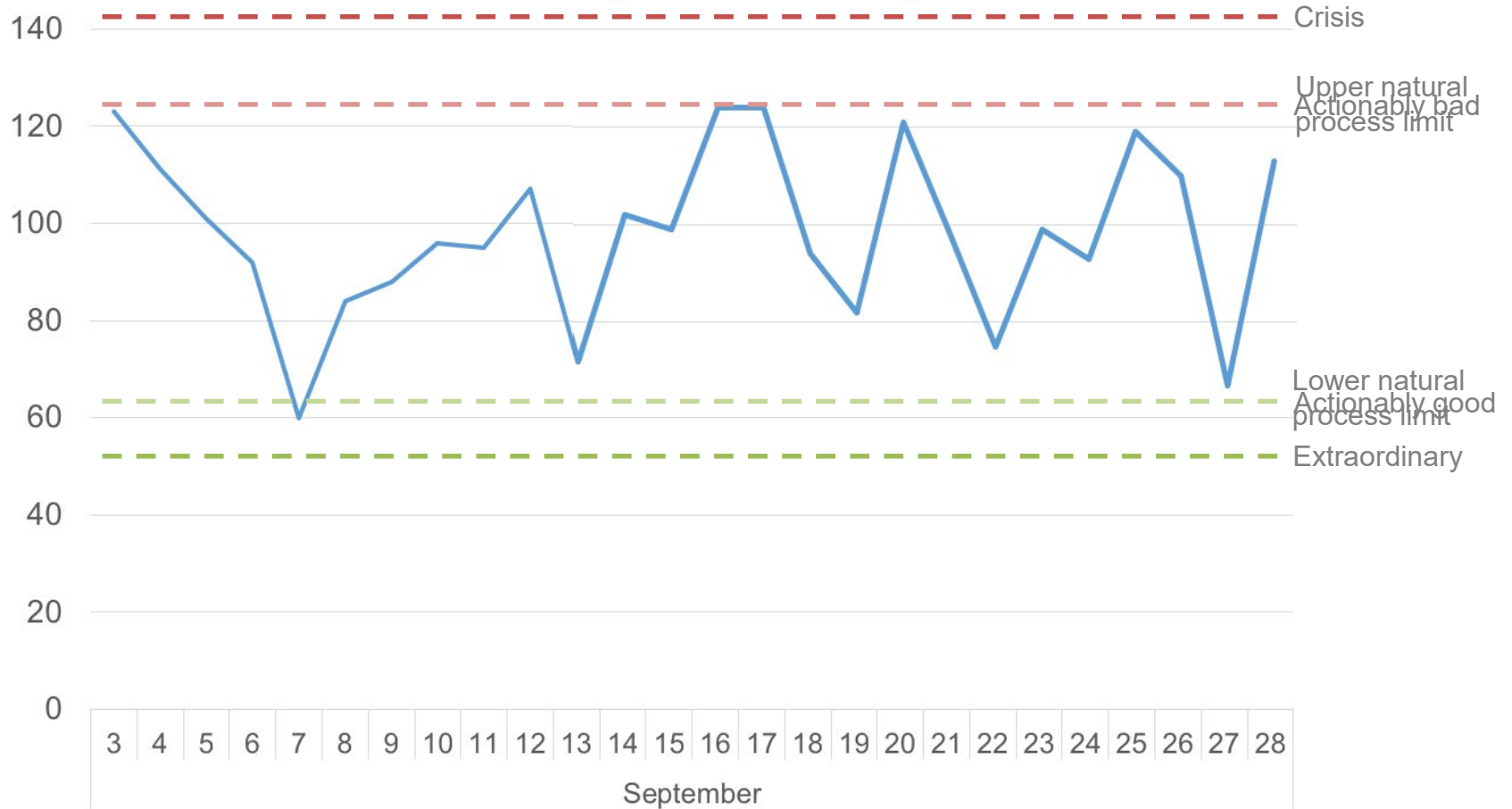
Manufacturing Defects Per Day



Automatically detecting metrics that require action

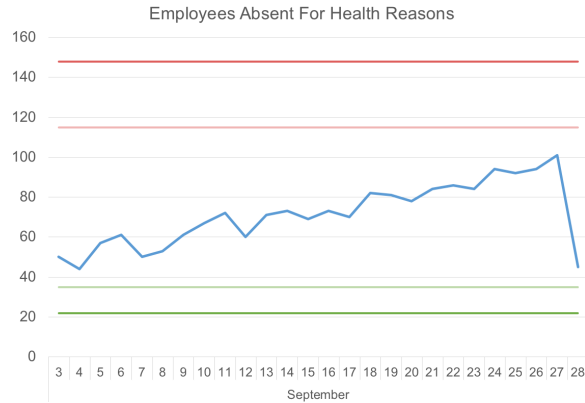
- The solution: A combination of approaches...
 - ✓ 1. Rethink how we flag metrics that require action
 - ✓ 2. Set flagging thresholds manually for key metrics (but informed by statistical analysis)
 3. Set alert conditions automatically (using statistics) for “non-key” metrics

Manufacturing Defects Per Day

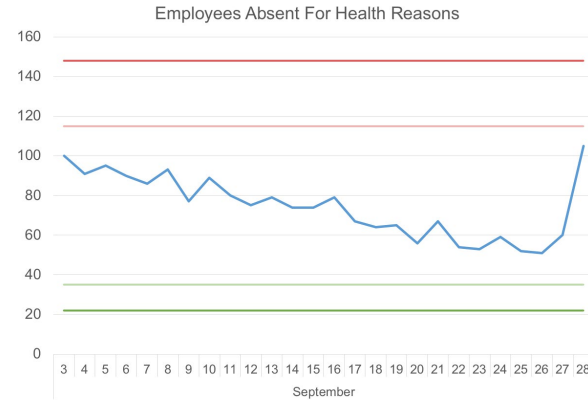


Other SPC-detectable patterns

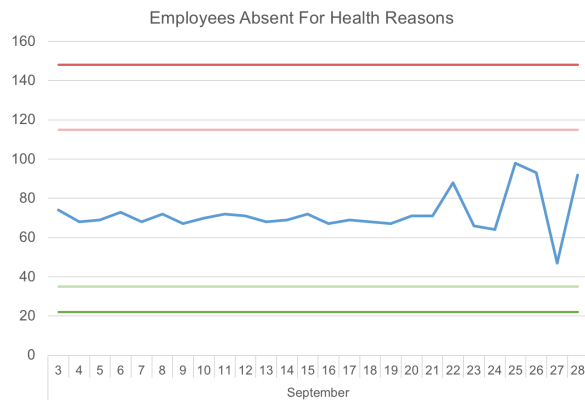
Sudden dip



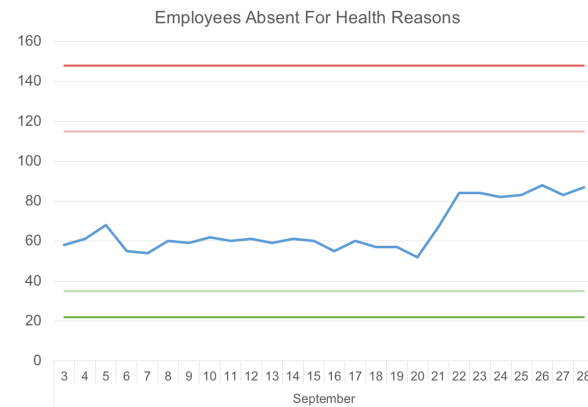
Sudden spike



Change in volatility



Change in steady state



Automatically detecting metrics that require action

- The solution: A combination of approaches...
 - ✓ 1. Rethink how we flag metrics that require action
 - ✓ 2. Set flagging thresholds manually for key metrics (but informed by statistical analysis)
 - ✓ 3. Set alert conditions automatically (using statistics) for “non-key” metrics

Important caveats!

- Metrics with certain types of patterns will trigger many false positives/negatives using basic SPC methods.
 - Cyclical metrics (seasonal, weekly, hourly cycles)
 - Continuously increasing/decreasing metrics
 - Highly erratic metrics (complex/non-existent patterns)

Important caveats!

- Even the most sophisticated flagging system will make mistakes.
 - Not aware of elections, flash sales, flu outbreaks, etc.
 - Not aware of real-world relationships between metrics.
- Automated flags should never override the judgment of a competent, informed user.

Important caveats!

- Just because we *can* monitor many metrics doesn't mean that we *should*!
 - Many metrics get monitored simply because the org has systems that generate those metrics, not because they truly need to be monitored.
- Determining which metrics truly need to be monitored requires other best practices.

Important caveats!

- Users shouldn't rely solely on Alert displays.
- A full review of all status displays should be performed at scheduled intervals (e.g., monthly).

Total Revenue (\$M's) – Northeast Region – Vs. Management Expectations - November 14, 2018

Trailing 8 quarters



Trailing 12 months



Trailing 14 days

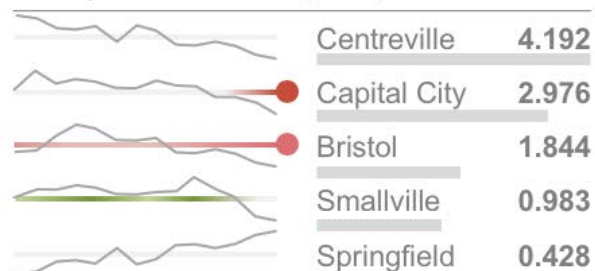


Current value

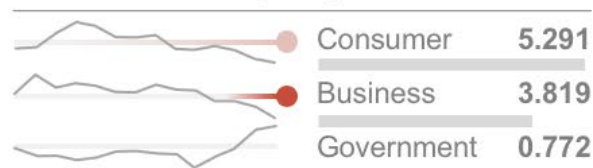
9.618

Broken down by...

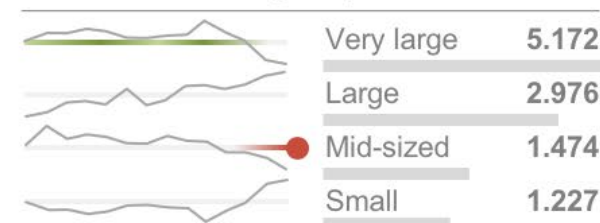
Metropolitan area Trailing 14 days



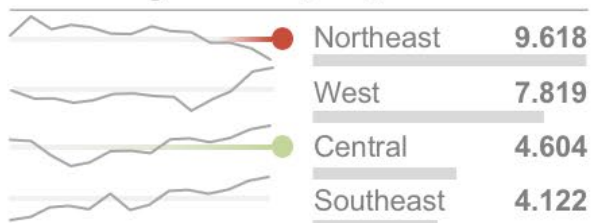
Business Unit Trailing 14 days



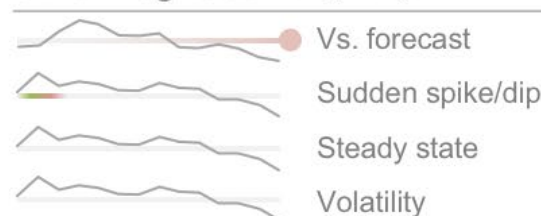
Customer size Trailing 14 days



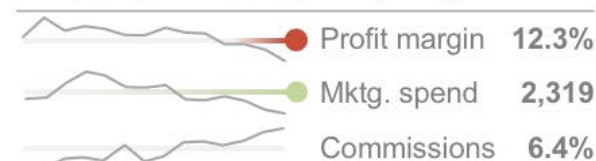
Other regions Trailing 14 days



Other flag tests Trailing 14 days

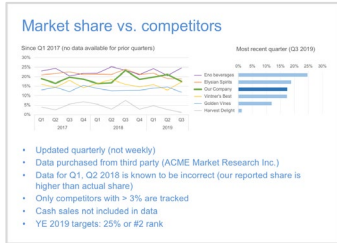


Influencer metrics Trailing 14 days



A typical monitoring process

Metric introduction displays



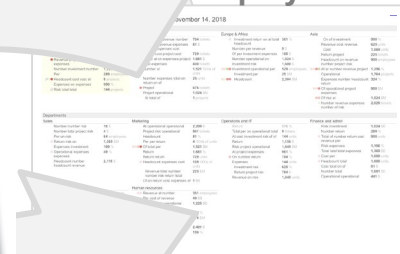
Status displays



Metric displays



Displays



13 types of data displays that are, unfortunately, all called “dashboards”

Dynamic Data Displays

Dynamically generated based on updating data

Usually...

- For enabling employees, customers, partners etc. to interact with an organization's data
- Subdued, plain visual design
- Little/no storytelling (rarely possible)
- Interactive, sometimes complex
- Primary purpose is to answer data-related questions

Monitoring displays

Status displays ✓
Metric introduction displays ✓
Metric diagnostic displays ✓
Alert displays ✓

Performance displays

Performance overview displays
KPI detail displays

Item browsing displays

Disaggregated item displays
Aggregated item displays
Item detail displays

Canned analysis displays

Various types

Static Data Displays

Custom-made based on a static snapshot of data

Usually ...

- Used inside and outside of organizations (training, marketing, public awareness, etc.)
- Eye-catching, creative visual design
- Involves storytelling
- Very basic interactivity, or none
- Primary purpose is to cause a desired change in the mind of an audience

Engagement displays

Persuasion displays

Explanation displays

Performance displays

- Enable users to:
 - Assess how well organization is achieving strategic goals.
 - Identify causes of poor performance.
 - Identify ways to improve performance in future.

Performance displays

- Answer questions such as:
 - “Are we achieving our strategic goals / mission?”
 - “Are we performing better or worse than before?”
 - “How can we perform better in the future?”

13 types of data displays that are, unfortunately, all called “dashboards”

Dynamic Data Displays

Dynamically generated based on updating data

Usually...

- For enabling employees, customers, partners etc. to interact with an organization's data
- Subdued, plain visual design
- Little/no storytelling (rarely possible)
- Interactive, sometimes complex
- Primary purpose is to answer data-related questions

Monitoring displays

Status displays ✓
Metric introduction displays ✓
Metric diagnostic displays ✓
Alert displays ✓

Performance displays

Performance overview displays ←
KPI detail displays

Item browsing displays

Disaggregated item displays
Aggregated item displays
Item detail displays

Canned analysis displays

Various types

Static Data Displays

Custom-made based on a static snapshot of data

Usually ...

- Used inside and outside of organizations (training, marketing, public awareness, etc.)
- Eye-catching, creative visual design
- Involves storytelling
- Very basic interactivity, or none
- Primary purpose is to cause a desired change in the mind of an audience

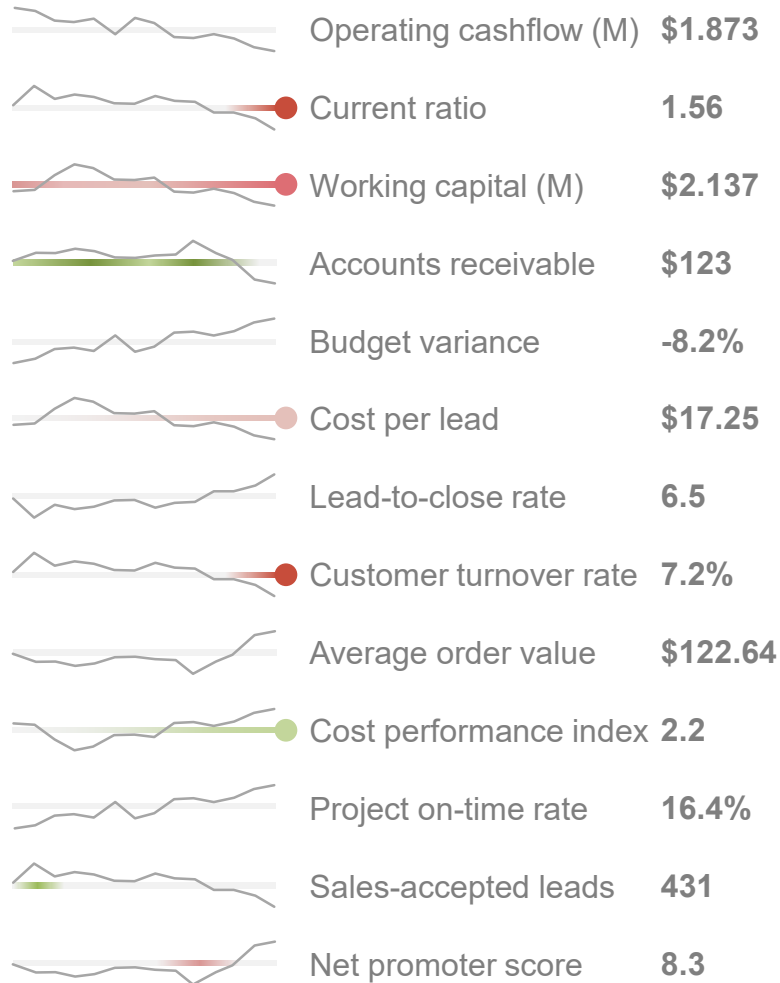
Engagement displays

Persuasion displays

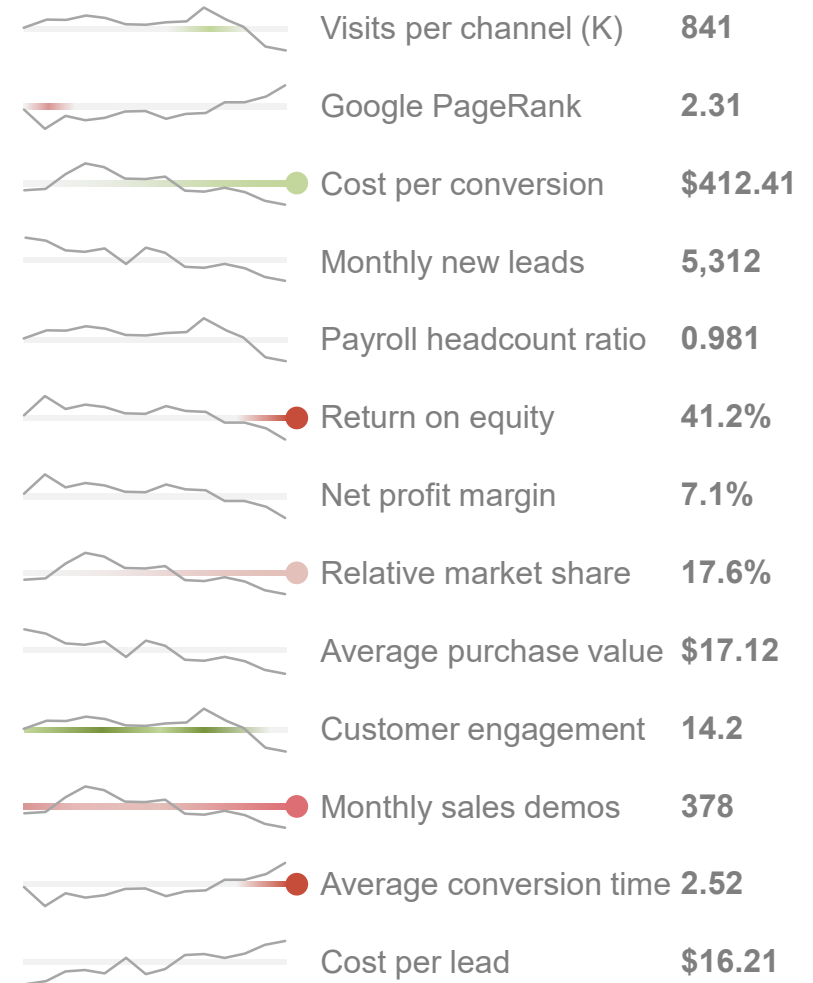
Explanation displays

Key Performance Indicators | All organization | October, 2018

Trailing 12 mos.



Trailing 12 mos.



13 types of data displays that are, unfortunately, all called “dashboards”

Dynamic Data Displays

Dynamically generated based on updating data

Usually...

- For enabling employees, customers, partners etc. to interact with an organization's data
- Subdued, plain visual design
- Little/no storytelling (rarely possible)
- Interactive, sometimes complex
- Primary purpose is to answer data-related questions

Monitoring displays

Status displays ✓
Metric introduction displays ✓
Metric diagnostic displays ✓
Alert displays ✓

Performance displays

Performance overview displays ✓
KPI detail displays ←

Item browsing displays

Disaggregated item displays
Aggregated item displays
Item detail displays

Canned analysis displays

Various types

Static Data Displays

Custom-made based on a static snapshot of data

Usually ...

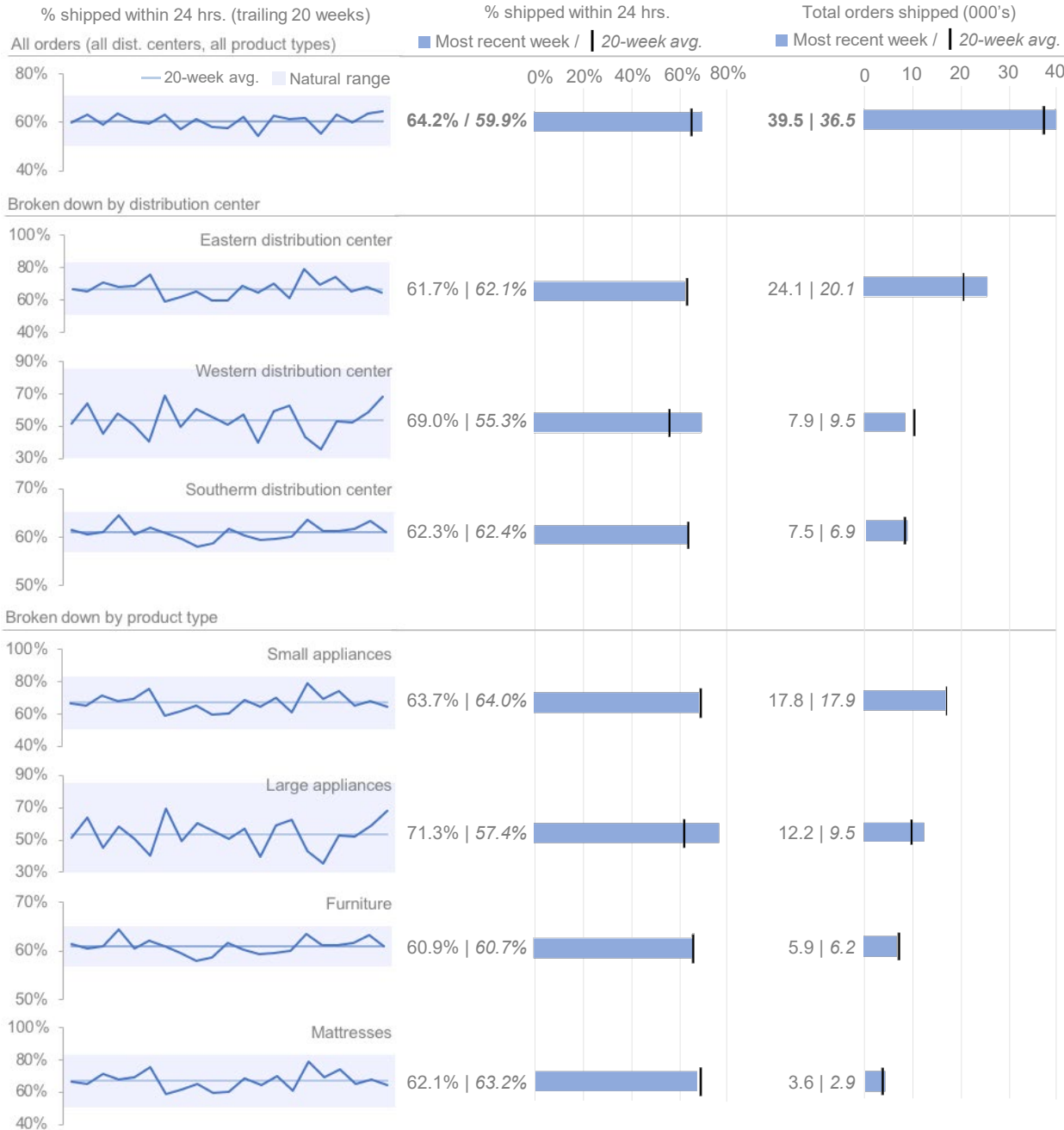
- Used inside and outside of organizations (training, marketing, public awareness, etc.)
- Eye-catching, creative visual design
- Involves storytelling
- Very basic interactivity, or none
- Primary purpose is to cause a desired change in the mind of an audience

Engagement displays

Persuasion displays

Explanation displays

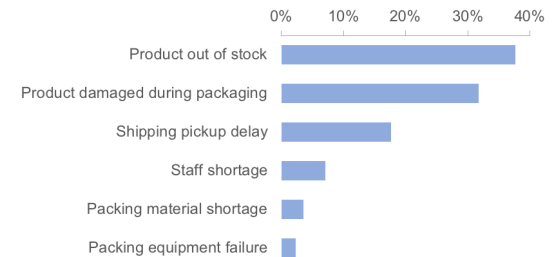
% of orders shipped within 24 hours | Week ending June 4th, 2019 % of orders shipped within 24 hours following receipt of customer payment



Comments

- Performance is steady but not increasing, so **not on track to meet YE goal of 70%**.
- Recent upward trend is not statistically meaningful.
- Logistics s/w update now available from vendor, who claims we can expect 5% increase in efficiency by updating. Pilot at one distribution center to evaluate?
- Among reasons for shipping delays (see chart below), "Product damaged during packaging" is unexpectedly high. Recommend investigation to determine cause.
- Investigate alternative packaging materials?

Top reasons for shipping delays



Potentially causally related metrics

Trailing 20 weeks

Distribution center employee satisfaction (out of 10)



Distribution center equipment failures



13 types of data displays that are, unfortunately, all called “dashboards”

Dynamic Data Displays

Dynamically generated based on updating data

Usually...

- For enabling employees, customers, partners etc. to interact with an organization's data
- Subdued, plain visual design
- Little/no storytelling (rarely possible)
- Interactive, sometimes complex
- Primary purpose is to answer data-related questions

Monitoring displays

Status displays ✓
Metric introduction displays ✓
Metric diagnostic displays ✓
Alert displays ✓

Performance displays

Performance overview displays ✓
KPI detail displays ✓

Item browsing displays

Disaggregated item displays
Aggregated item displays
Item detail displays

Canned analysis displays

Various types

Static Data Displays

Custom-made based on a static snapshot of data

Usually ...

- Used inside and outside of organizations (training, marketing, public awareness, etc.)
- Eye-catching, creative visual design
- Involves storytelling
- Very basic interactivity, or none
- Primary purpose is to cause a desired change in the mind of an audience

Engagement displays

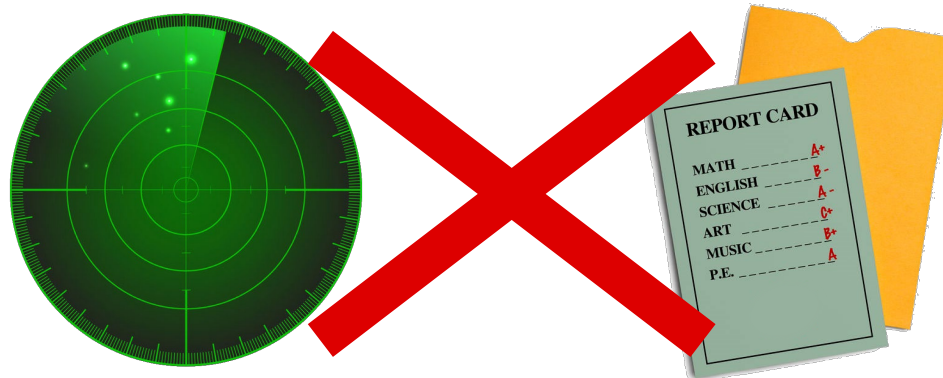
Persuasion displays

Explanation displays

Why separate displays for monitoring and performance?

- Major differences:
 - User intent (reactive trouble-spotting vs. proactive performance improvement)
 - Metric inclusion criteria, number of metrics to include
 - Review frequencies
 - Target user groups (roles vs. teams)

Monitoring displays “The dashboard” Performance displays



13 types of data displays that are, unfortunately, all called “dashboards”

Dynamic Data Displays

Dynamically generated based on updating data

Usually...

- For enabling employees, customers, partners etc. to interact with an organization's data
- Subdued, plain visual design
- Little/no storytelling (rarely possible)
- Interactive, sometimes complex
- Primary purpose is to answer data-related questions

Monitoring displays

Status displays ✓
Metric introduction displays ✓
Metric diagnostic displays ✓
Alert displays ✓

Performance displays

Performance overview displays ✓
KPI detail displays ✓

Item browsing displays

Disaggregated item displays
Aggregated item displays
Item detail displays

Canned analysis displays

Various types

Static Data Displays

Custom-made based on a static snapshot of data

Usually ...

- Used inside and outside of organizations (training, marketing, public awareness, etc.)
- Eye-catching, creative visual design
- Involves storytelling
- Very basic interactivity, or none
- Primary purpose is to cause a desired change in the mind of an audience

Engagement displays

Persuasion displays

Explanation displays

Item browsing displays

- Enable users to:
 - Interact with potentially large data sets (patients, projects, customers, transactions, etc.)

Item browsing displays

- Answer questions such as:
 - “Which of our employees have been here more than five years and make less than \$60K/yr?”
 - “How many widgets did we sell to small businesses in the U.K. in Q4 of last year?”
 - “Which region contributed the most donations to our fundraising campaign?”

13 types of data displays that are, unfortunately, all called “dashboards”

Dynamic Data Displays

Dynamically generated based on updating data

Usually...

- For enabling employees, customers, partners etc. to interact with an organization's data
- Subdued, plain visual design
- Little/no storytelling (rarely possible)
- Interactive, sometimes complex
- Primary purpose is to answer data-related questions

Monitoring displays

Status displays ✓
Metric introduction displays ✓
Metric diagnostic displays ✓
Alert displays ✓

Performance displays

Performance overview displays ✓
KPI detail displays ✓

Item browsing displays

Disaggregated item displays ←
Aggregated item displays
Item detail displays

Canned analysis displays

Various types

Static Data Displays

Custom-made based on a static snapshot of data

Usually ...

- Used inside and outside of organizations (training, marketing, public awareness, etc.)
- Eye-catching, creative visual design
- Involves storytelling
- Very basic interactivity, or none
- Primary purpose is to cause a desired change in the mind of an audience

Engagement displays

Persuasion displays

Explanation displays

Key metrics, all hospitals | April 20, 2019

Hospital	Avg. patient satisfaction (/10)	ER wait time (mins)	ER bed occupancy	Room occupancy	Avg. length of stay (days)	Medical errors per 100 patient-days	Patient-to-staff ratio	Lab turnaround time (hrs)	Re-admission rate	Budget performance
Northwest Hospital	9.9	163.3	69%	68%	6.2	3.4	5.2	8.9	26.8%	-1.4%
Providence Family Hospital	9.7	313.3	77%	86%	4.6	1.7	5.5	15.2	21.1%	8.9%
St. Mary's Medical Center	8.6	260.7	64%	89%	1.2	3.3	2.9	13.6	18.6%	0.3%
Sacred Heart Hospital	8.4	318.0	81%	94%	5.5	2.9	4.3	7.8	20.6%	2.0%
Capital Medical Center	8.3	346.1	64%	92%	3.9	3.1	6.0	7.1	23.1%	7.0%
Samaritan Hospital	8.1	234.3	58%	80%	4.6	3.3	5.3	16.8	22.8%	5.3%
Mercy Hospital	7.9	242.4	92%	82%	8.8	2.3	5.2	18.2	23.4%	4.0%
Sunnylake Hospital	7.8	120.7	88%	43%	4.2	2.6	4.7	13.7	31.0%	1.7%
St. Joseph's Hospital	7.6	242.0	68%	100%	6.9	3.1	5.2	12.1	24.3%	3.7%
Western Regional Medical Centre	7.6	190.2	58%	100%	5.4	3.5	4.1	14.8	25.9%	4.1%
Sick Children's Hospital	7.4	223.4	79%	71%	6.5	4.7	4.1	8.7	26.4%	-8.6%
Grand River Hospital	7.3	131.6	98%	80%	8.1	3.6	4.9	11.6	26.4%	-15.6%
Springfield Hospital	7.1	116.3	74%	85%	7.3	3.5	3.7	13.1	28.1%	-5.7%
Main St. Hospital	6.9	266.5	59%	72%	5.0	3.6	5.1	14.7	21.2%	-15.8%
Mid-Valley Hospital	6.7	265.6	87%	51%	4.0	4.6	5.8	10.4	30.8%	-7.4%
City Hospital of Mainville	6.7	158.4	89%	84%	3.2	2.5	4.2	10.5	28.3%	4.1%
Bayfront Health Care	6.4	206.6	99%	72%	5.7	3.2	5.6	5.4	21.9%	7.3%
State University Hospital	6.4	176.4	50%	69%	7.0	2.4	6.4	12.9	25.5%	7.3%
Cambidge General Hospital	6.3	175.9	80%	100%	3.9	3.0	6.0	9.3	29.0%	1.2%
St. Thomas Hospital	6.1	246.7	63%	90%	8.6	3.1	5.6	13.8	23.7%	-15.0%
Riverdale General Hospital	6.1	191.8	65%	82%	9.0	3.6	6.4	18.5	25.5%	14.6%
South Central Medical Center	6.0	111.7	83%	44%	3.7	3.4	4.6	11.6	17.7%	-3.9%
Lakeshore Medical Centre	6.0	201.4	91%	62%	7.9	4.6	4.8	11.5	15.7%	-10.2%
Jewish General Hospital	6.0	133.5	63%	72%	5.3	3.0	7.1	14.2	25.0%	-6.2%
Eastern Regional Hospital	5.4	139.0	91%	73%	5.5	2.7	6.2	11.1	22.2%	15.8%
Littleton Medical Center	5.3	224.2	95%	78%	6.0	1.3	5.8	11.1	20.5%	15.2%
Forestglen Hospital	5.2	267.4	68%	74%	6.7	4.9	6.6	9.9	27.1%	-9.8%

First Period: Algebra 1			As of May 1, 2012 (80% complete)										Help					
Student		Overall Course Grade	Assignments						Assessments		Attendance				Behavior			
			YTD	Spread	50%	Last	100%	Late	Last 5	Last	February	March	April	May	Ref	Det		
<div></div> Bae Kim	E	F	<div></div> <div></div> <div></div> <div></div> <div></div>	59	<div></div>	<div></div>				3	<div></div>	39	<div></div>				3	2
Fiona Reeves	S	D	<div></div> <div></div> <div></div> <div></div> <div></div>	65	<div></div>	<div></div>				3	<div></div>	47	<div></div>				1	1
<div></div> Brian Francis		D	<div></div> <div></div> <div></div> <div></div> <div></div>	65	<div></div>	<div></div>				2	<div></div>	67	<div></div>					
<div></div> Frederick Chandler		F	<div></div> <div></div> <div></div> <div></div> <div></div>	66	<div></div>	<div></div>				2	<div></div>	41	<div></div>				2	2
Anthony Harper	S	D	<div></div> <div></div> <div></div> <div></div> <div></div>	69	<div></div>	<div></div>				1	<div></div>	62	<div></div>					
Christopher Murphy		D	<div></div> <div></div> <div></div> <div></div> <div></div>	70	<div></div>	<div></div>				1	<div></div>	55	<div></div>					
Kirsten Holmes		C	<div></div> <div></div> <div></div> <div></div> <div></div>	72	<div></div>	<div></div>					<div></div>	67	<div></div>				1	
Nikolas Mikhailovich	E	C	<div></div> <div></div> <div></div> <div></div> <div></div>	72	<div></div>	<div></div>					<div></div>	63	<div></div>					
Roshawn Dawson		C	<div></div> <div></div> <div></div> <div></div> <div></div>	72	<div></div>	<div></div>					<div></div>	78	<div></div>				1	1
James Martin		C	<div></div> <div></div> <div></div> <div></div> <div></div>	74	<div></div>	<div></div>				1	<div></div>	71	<div></div>					
Blaine Harper		C	<div></div> <div></div> <div></div> <div></div> <div></div>	75	<div></div>	<div></div>					<div></div>	71	<div></div>				1	1
George Smith		C	<div></div> <div></div> <div></div> <div></div> <div></div>	78	<div></div>	<div></div>				1	<div></div>	76	<div></div>				1	1
Regan Potrero		C	<div></div> <div></div> <div></div> <div></div> <div></div>	79	<div></div>	<div></div>				1	<div></div>	67	<div></div>					
Britta Jones		B	<div></div> <div></div> <div></div> <div></div> <div></div>	81	<div></div>	<div></div>					<div></div>	85	<div></div>					
Scott Ortiz		B	<div></div> <div></div> <div></div> <div></div> <div></div>	82	<div></div>	<div></div>				1	<div></div>	82	<div></div>					
Xu Mei		B	<div></div> <div></div> <div></div> <div></div> <div></div>	83	<div></div>	<div></div>					<div></div>	83	<div></div>					
Jaime Goss		B	<div></div> <div></div> <div></div> <div></div> <div></div>	84	<div></div>	<div></div>					<div></div>	82	<div></div>				1	1
Samuel Miller		B	<div></div> <div></div> <div></div> <div></div> <div></div>	84	<div></div>	<div></div>					<div></div>	81	<div></div>					
Maria Garcia		B	<div></div> <div></div> <div></div> <div></div> <div></div>	86	<div></div>	<div></div>					<div></div>	72	<div></div>				2	1
Jose Domingo		B	<div></div> <div></div> <div></div> <div></div> <div></div>	86	<div></div>	<div></div>					<div></div>	84	<div></div>					
Lawrence Parker		B	<div></div> <div></div> <div></div> <div></div> <div></div>	87	<div></div>	<div></div>					<div></div>	80	<div></div>				1	1
Fariah Jackson		B	<div></div> <div></div> <div></div> <div></div> <div></div>	88	<div></div>	<div></div>					<div></div>	84	<div></div>					
Sarah Jameson		B	<div></div> <div></div> <div></div> <div></div> <div></div>	88	<div></div>	<div></div>				1	<div></div>	78	<div></div>				1	1
David Chenowith		B	<div></div> <div></div> <div></div> <div></div> <div></div>	88	<div></div>	<div></div>					<div></div>	80	<div></div>				1	
Alison Perry		B	<div></div> <div></div> <div></div> <div></div> <div></div>	89	<div></div>	<div></div>					<div></div>	85	<div></div>					
Amala Singh		A	<div></div> <div></div> <div></div> <div></div> <div></div>	92	<div></div>	<div></div>					<div></div>	91	<div></div>				1	
Hannah Li		A	<div></div> <div></div> <div></div> <div></div> <div></div>	94	<div></div>	<div></div>					<div></div>	94	<div></div>					
James Snow		A	<div></div> <div></div> <div></div> <div></div> <div></div>	94	<div></div>	<div></div>					<div></div>	91	<div></div>					
Donald Chase		A	<div></div> <div></div> <div></div> <div></div> <div></div>	94	<div></div>	<div></div>					<div></div>	92	<div></div>				1	1
Holly Norton		A	<div></div> <div></div> <div></div> <div></div> <div></div>	98	<div></div>	<div></div>					<div></div>	98	<div></div>					
S = Special Ed student E = English language deficiency		<div></div> <div></div> <div></div> <div></div> <div></div>		<div></div>		<div></div>		<div></div>		<div></div>		<div></div>		<div></div>		13 11 6 6		

13 types of data displays that are, unfortunately, all called “dashboards”

Dynamic Data Displays

Dynamically generated based on updating data

Usually...

- For enabling employees, customers, partners etc. to interact with an organization's data
- Subdued, plain visual design
- Little/no storytelling (rarely possible)
- Interactive, sometimes complex
- Primary purpose is to answer data-related questions

Monitoring displays

Status displays ✓
Metric introduction displays ✓
Metric diagnostic displays ✓
Alert displays ✓

Performance displays

Performance overview displays ✓
KPI detail displays ✓

Item browsing displays

Disaggregated item displays ✓
Aggregated item displays ←
Item detail displays

Canned analysis displays

Various types

Static Data Displays

Custom-made based on a static snapshot of data

Usually ...

- Used inside and outside of organizations (training, marketing, public awareness, etc.)
- Eye-catching, creative visual design
- Involves storytelling
- Very basic interactivity, or none
- Primary purpose is to cause a desired change in the mind of an audience

Engagement displays

Persuasion displays

Explanation displays



13 types of data displays that are, unfortunately, all called “dashboards”

Dynamic Data Displays

Dynamically generated based on updating data

Usually...

- For enabling employees, customers, partners etc. to interact with an organization's data
- Subdued, plain visual design
- Little/no storytelling (rarely possible)
- Interactive, sometimes complex
- Primary purpose is to answer data-related questions

Monitoring displays

Status displays ✓
Metric introduction displays ✓
Metric diagnostic displays ✓
Alert displays ✓

Performance displays

Performance overview displays ✓
KPI detail displays ✓

Item browsing displays

Disaggregated item displays ✓
Aggregated item displays ✓
Item detail displays ←

Canned analysis displays

Various types

Static Data Displays

Custom-made based on a static snapshot of data

Usually ...

- Used inside and outside of organizations (training, marketing, public awareness, etc.)
- Eye-catching, creative visual design
- Involves storytelling
- Very basic interactivity, or none
- Primary purpose is to cause a desired change in the mind of an audience

Engagement displays

Persuasion displays

Explanation displays

- Search reports and help
- HOME
- CUSTOMIZATION
- Reports
 - REAL-TIME
- AUDIENCE
- ACQUISITION
 - Overview
 - All Traffic
 - AdWords
 - Search Console
 - Social
 - Campaigns
- BEHAVIOR
- CONVERSIONS
- DISCOVER
- ADMIN

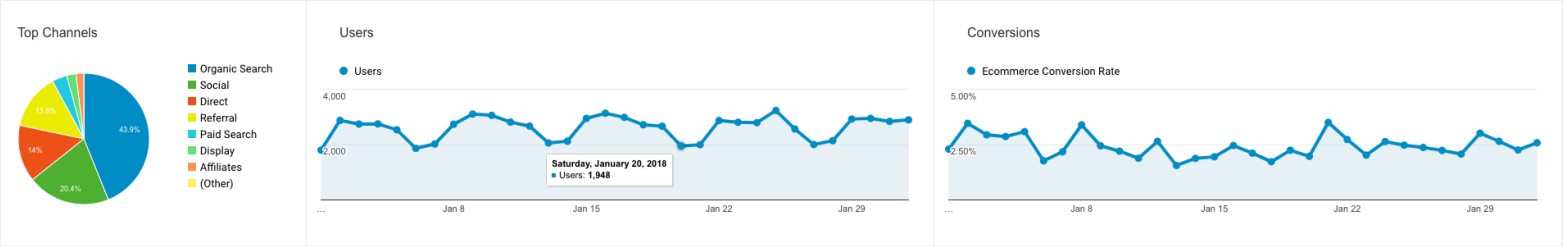
Acquisition Overview ✓ SAVE EXPORT SHARE INTELLIGENCE Jan 1, 2018 - Feb 1, 2018

All Users
100.00% Users

+ Add Segment

Primary Dimension: Default Channel Grouping

Conversion: eCommerce



	Acquisition			Behavior			Conversions		
	Users	New Users	Sessions	Bounce Rate	Pages / Session	Avg. Session Duration	Ecommerce Conversion Rate	Transactions	Revenue
	72,845	66,482	92,423	48.31%	3.94	00:02:09	2.45%	2,261	\$448,738.80
1 Organic Search	32,397			48.74%			0.80%		
2 Social	15,053			64.19%			0.07%		
3 Direct	10,329			51.56%			1.61%		
4 Referral	10,161			22.61%			10.04%		
5 Paid Search	2,728			60.52%			0.90%		
6 Display	1,696			85.25%			0.16%		
7 Affiliates	1,434			50.67%			0.10%		
8 (Other)	2			33.33%			0.00%		

To see all 8 Channels click [here](#).

13 types of data displays that are, unfortunately, all called “dashboards”

Dynamic Data Displays

Dynamically generated based on updating data

Usually...

- For enabling employees, customers, partners etc. to interact with an organization's data
- Subdued, plain visual design
- Little/no storytelling (rarely possible)
- Interactive, sometimes complex
- Primary purpose is to answer data-related questions

Monitoring displays

Status displays ✓
Metric introduction displays ✓
Metric diagnostic displays ✓
Alert displays ✓

Performance displays

Performance overview displays ✓
KPI detail displays ✓

Item browsing displays

Disaggregated item displays ✓
Aggregated item displays ✓
Item detail displays ✓

Canned analysis displays

Various types

Static Data Displays

Custom-made based on a static snapshot of data

Usually ...

- Used inside and outside of organizations (training, marketing, public awareness, etc.)
- Eye-catching, creative visual design
- Involves storytelling
- Very basic interactivity, or none
- Primary purpose is to cause a desired change in the mind of an audience

Engagement displays

Persuasion displays

Explanation displays

Canned analysis displays

- Enable users to:
 - Perform potentially complex analytical tasks that have been “packaged” behind a simple user interface.

Canned analysis displays

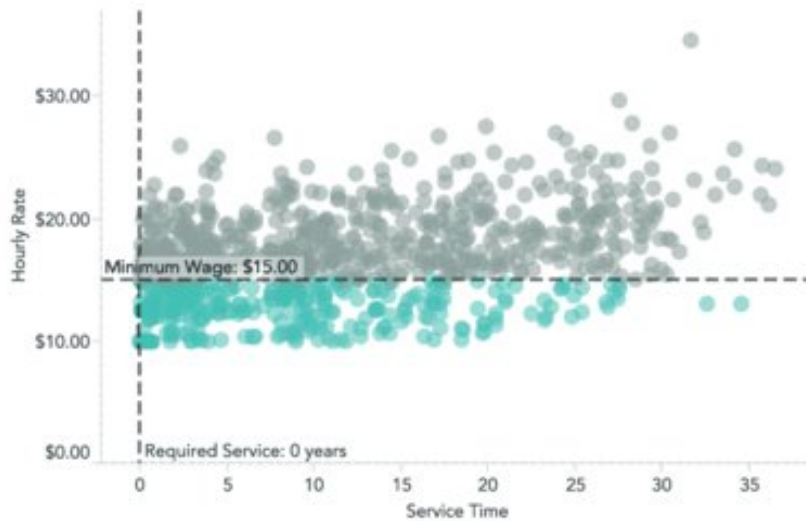
- Answer questions such as:
 - “How does our profitability change at different sales commission levels?”
 - “What’s the risk of insuring this property?”
 - “Should we locate a new branch at this address?”

What-If Analysis: Impact of Minimum Wage

Proposed Minimum Wage: Required Service:

Below
296 (32.1%)

Above
625 (67.9%)



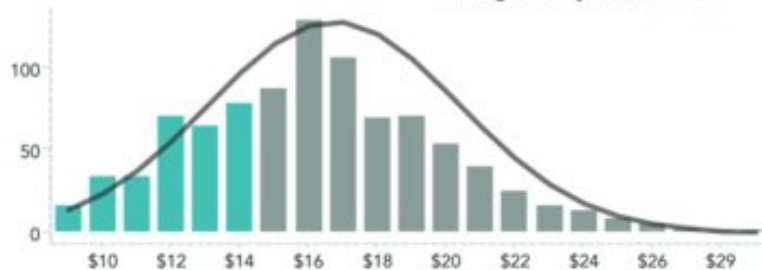
Dollar Impact of
Minimum Wage:
\$1,788,805

Employees Below
Minimum Wage:
296

	Dollar Impact of Minimum Wage:	Employees Below Minimum Wage:
Services	\$812,378	131
Facilities	\$730,562	93
Marketing	\$84,479	23
Logistics	\$50,630	15
Supply Chain	\$37,987	13
Legal	\$27,191	4
Operations	\$12,265	3
Customer Service	\$10,923	4
Information Technology	\$8,760	3
Human Resources	\$7,539	4
Purchasing	\$4,272	1
Research & Development	\$1,818	2

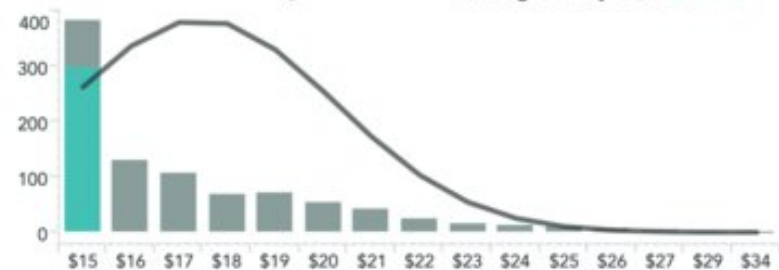
Current Distribution

Average Hourly Rate: **\$16.72**



Distribution with Minimum Wage

Average Hourly Rate: **\$17.45**



13 types of data displays that are, unfortunately, all called “dashboards”

Dynamic Data Displays

Dynamically generated based on updating data

Usually...

- For enabling employees, customers, partners etc. to interact with an organization's data
- Subdued, plain visual design
- Little/no storytelling (rarely possible)
- Interactive, sometimes complex
- Primary purpose is to answer data-related questions

Monitoring displays

Status displays ✓
Metric introduction displays ✓
Metric diagnostic displays ✓
Alert displays ✓

Performance displays

Performance overview displays ✓
KPI detail displays ✓

Item browsing displays

Disaggregated item displays ✓
Aggregated item displays ✓
Item detail displays ✓

Canned analysis displays

Various types ✓

Static Data Displays

Custom-made based on a static snapshot of data

Usually ...

- Used inside and outside of organizations (training, marketing, public awareness, etc.)
- Eye-catching, creative visual design
- Involves storytelling
- Very basic interactivity, or none
- Primary purpose is to cause a desired change in the mind of an audience

Engagement displays

Persuasion displays

Explanation displays

New Tab

x +

← → ↻ [www.our-organization.com/reporting](#)

CFO Information Displays

Find metrics, canned analyses, displays, etc.

Scan for issues

Is there anything that requires my attention at the moment?

- [Current \(real-time\)](#)
- [Daily](#)
- [Weekly](#)
- [Monthly](#)

Review performance

Are we achieving our strategic goals? How can we improve?

- [Monthly](#)
- [Quarterly](#)

Slice and dice data

I have questions about...

- [Products](#)
- [Customers](#)
- [Orders](#)
- [Payments](#)

Download data

I want to download data and analyze it myself.

- [Query builder, ETL tool, etc.](#)

Canned analyses

Favorites:

- [Sales compensation "what if" simulator](#)
- [Most at-risk customers](#)
- [Products most frequently sold together](#)

All canned analyses:

- [Suspicious transactions](#)
- [Most at-risk customers](#)
- [Products most frequently sold together](#)
- [Out-of-stock products by estimated loss](#)
- [Transaction counts by payment method](#)

13 types of data displays that are, unfortunately, all called “dashboards”

Dynamic Data Displays

Dynamically generated based on updating data

Usually...

- For enabling employees, customers, partners etc. to interact with an organization's data
- Subdued, plain visual design
- Little/no storytelling (rarely possible)
- Interactive, sometimes complex
- Primary purpose is to answer data-related questions

Monitoring displays

Status displays ✓
Metric introduction displays ✓
Metric diagnostic displays ✓
Alert displays ✓

Performance displays

Performance overview displays ✓
KPI detail displays ✓

Item browsing displays

Disaggregated item displays ✓
Aggregated item displays ✓
Item detail displays ✓

Canned analysis displays

Various types ✓

Static Data Displays

Custom-made based on a static snapshot of data

Usually ...

- Used inside and outside of organizations (training, marketing, public awareness, etc.)
- Eye-catching, creative visual design
- Involves storytelling
- Very basic interactivity, or none
- Primary purpose is to cause a desired change in the mind of an audience

Engagement displays

Persuasion displays

Explanation displays



13 types of data displays that are, unfortunately, all called “dashboards”

Dynamic Data Displays

Dynamically generated based on updating data

Usually...

- For enabling employees, customers, partners etc. to interact with an organization's data
- Subdued, plain visual design
- Little/no storytelling (rarely possible)
- Interactive, sometimes complex
- Primary purpose is to answer data-related questions

Monitoring displays

Status displays ✓
Metric introduction displays ✓
Metric diagnostic displays ✓
Alert displays ✓

Performance displays

Performance overview displays ✓
KPI detail displays ✓

Item browsing displays

Disaggregated item displays ✓
Aggregated item displays ✓
Item detail displays ✓

Canned analysis displays

Various types ✓

Static Data Displays

Custom-made based on a static snapshot of data

Usually ...

- Used inside and outside of organizations (training, marketing, public awareness, etc.)
- Eye-catching, creative visual design
- Involves storytelling
- Very basic interactivity, or none
- Primary purpose is to cause a desired change in the mind of an audience

Persuasion displays ←

Explanation displays

Engagement displays

Persuasion displays

- For persuading a target audience to adopt a view, take an action, choose an alternative, etc.
- Effectiveness usually gauged based on degree to which target audience adopts desired view or takes desired action.

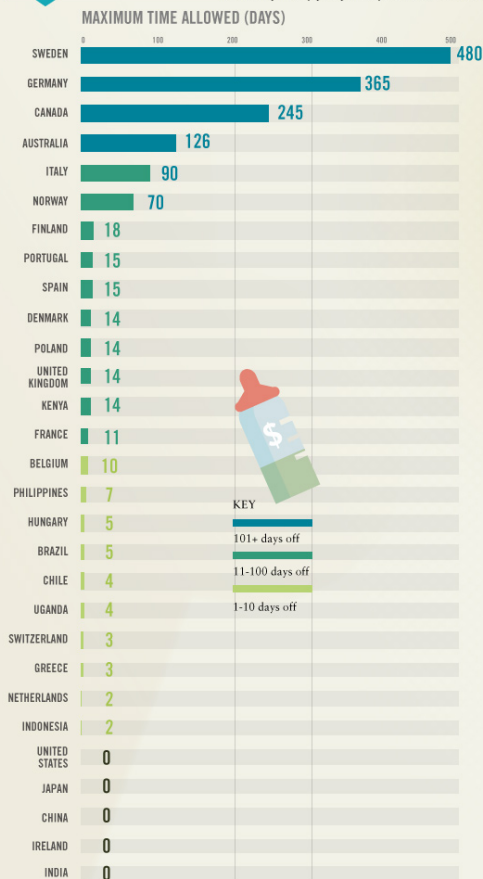
PAPA, DON'T LEAVE

PATERNITY LEAVE AROUND THE WORLD

Newborn babies need their fathers around, at least to give exhausted mothers the extra helping hand. But unlike other industrialized nations, the United States has no comprehensive policy for guaranteeing paid time off for recently anointed dads, who are forced to cobble together extra sick days and vacation time instead. In households where dads are the ones raising the new baby, getting by is even tougher.

PAID PATERNITY LEAVE

The United States is among the world's countries that don't require any paid paternity leave for new fathers.



ONLY 22 PERCENT OF AMERICAN EMPLOYEES

who are eligible under the Family and Medical Leave Act of 1993 take the paternal leave because most can't afford the loss of income.

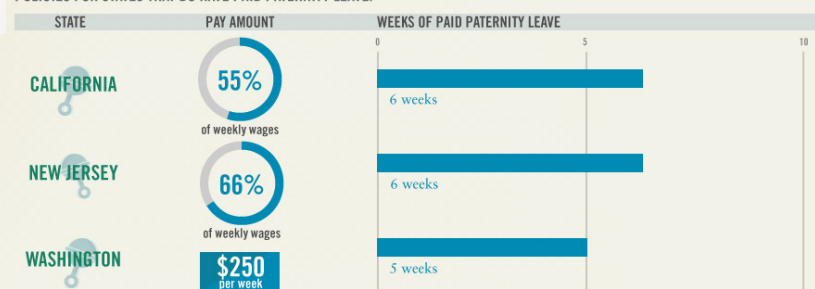
U.S. PATERNITY LEAVE: THE SMALL PRINT

UNPAID

Most American parents who take time off after their child's birth do so under the **Family and Medical Leave Act of 1993**, which guarantees employees who work at companies with more than 50 employees **12 weeks unpaid** leave for the birth or adoption of a new child, or medical leave for the employee or an immediate family member with a serious health condition.

ALTHOUGH THE U.S. ALLOWS PARENTS UNPAID LEAVE, IT DOES NOT CURRENTLY HAVE A SWEEPING LEGISLATIVE POLICY FOR PATERNITY LEAVE.

POLICIES FOR STATES THAT DO HAVE PAID PATERNITY LEAVE:



OPINIONS HEARD AROUND THE GLOBE



UNITED KINGDOM

According to a uSwitch survey, even though two paid weeks of paternity leave is an option in the United Kingdom, not all fathers end up taking it.

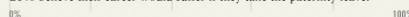
4 out of 10 working dads in the United Kingdom don't take advantage of paternity leave.



52% believe that they wouldn't be able to afford to take the time off.

49% don't think they could take the time off in their line of work.

26% believe their career would suffer if they take the paternity leave.



IRELAND

Should employers be obliged to grant male employees paid paternity leave after the birth of their child?



QUEBEC, CANADA

Would you ask for maximum paternity leave?



SOURCES: U.S. DEPARTMENT OF LABOR, PAIDFAMILYLEAVE.ORG, REUTERS.COM, HUFFINGTONPOST.COM, CATALYST.ORG, NEWSTALK.IE, CHINADAILY.COM, ENPLAW.CO.UK, NATIONAL PARTNERSHIP FOR WOMEN & FAMILIES, CENTER FOR ECONOMIC AND POLICY RESEARCH, CLEARFACTS.CA, GUARDIAN.CO.UK

A COLLABORATION BETWEEN GOOD AND COLUMN FIVE

13 types of data displays that are, unfortunately, all called “dashboards”

Dynamic Data Displays

Dynamically generated based on updating data

Usually...

- For enabling employees, customers, partners etc. to interact with an organization's data
- Subdued, plain visual design
- Little/no storytelling (rarely possible)
- Interactive, sometimes complex
- Primary purpose is to answer data-related questions

Monitoring displays

Status displays ✓
Metric introduction displays ✓
Metric diagnostic displays ✓
Alert displays ✓

Performance displays

Performance overview displays ✓
KPI detail displays ✓

Item browsing displays

Disaggregated item displays ✓
Aggregated item displays ✓
Item detail displays ✓

Canned analysis displays

Various types ✓

Static Data Displays

Custom-made based on a static snapshot of data

Usually ...

- Used inside and outside of organizations (training, marketing, public awareness, etc.)
- Eye-catching, creative visual design
- Involves storytelling
- Very basic interactivity, or none
- Primary purpose is to cause a desired change in the mind of an audience

Persuasion displays ✓
Explanation displays ←
Engagement displays

Explanation displays

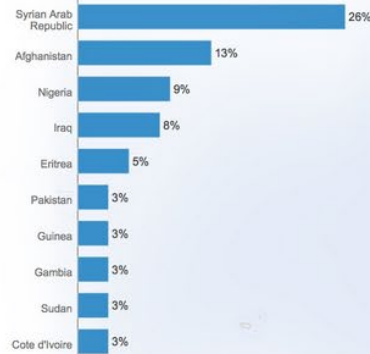
- For increasing a target audience's comprehension or familiarity with a concept, process, etc.
- Effectiveness usually gauged based on degree of improvement in target audience comprehension/familiarity.

Refugees/Migrants Emergency Response - Mediterranean

Increasing numbers of refugees and migrants take their chances aboard unseaworthy boats and dinghies in a desperate bid to reach Europe. The vast majority of those attempting this dangerous crossing are in need of international protection, fleeing war, violence and persecution in their country of origin. Every year these movements continue to exact a devastating toll on human life.

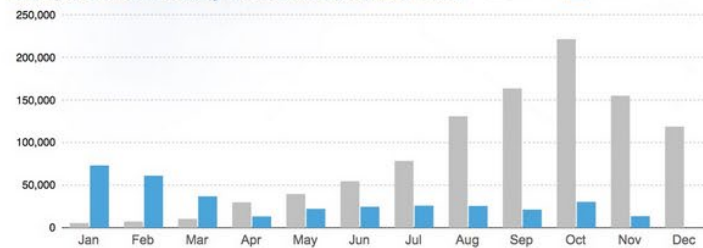
Top-10 nationalities of Mediterranean sea arrivals

Top-10 nationalities represent **77%** of the sea arrivals based on arrivals since 1 Jan 2016

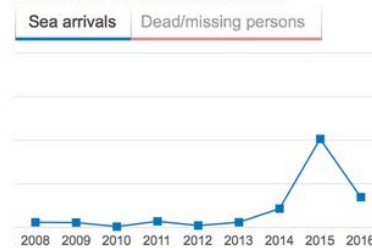


Other countries represent 23% of the total

Comparison of monthly Mediterranean sea arrivals



Evolution - Mediterranean Sea

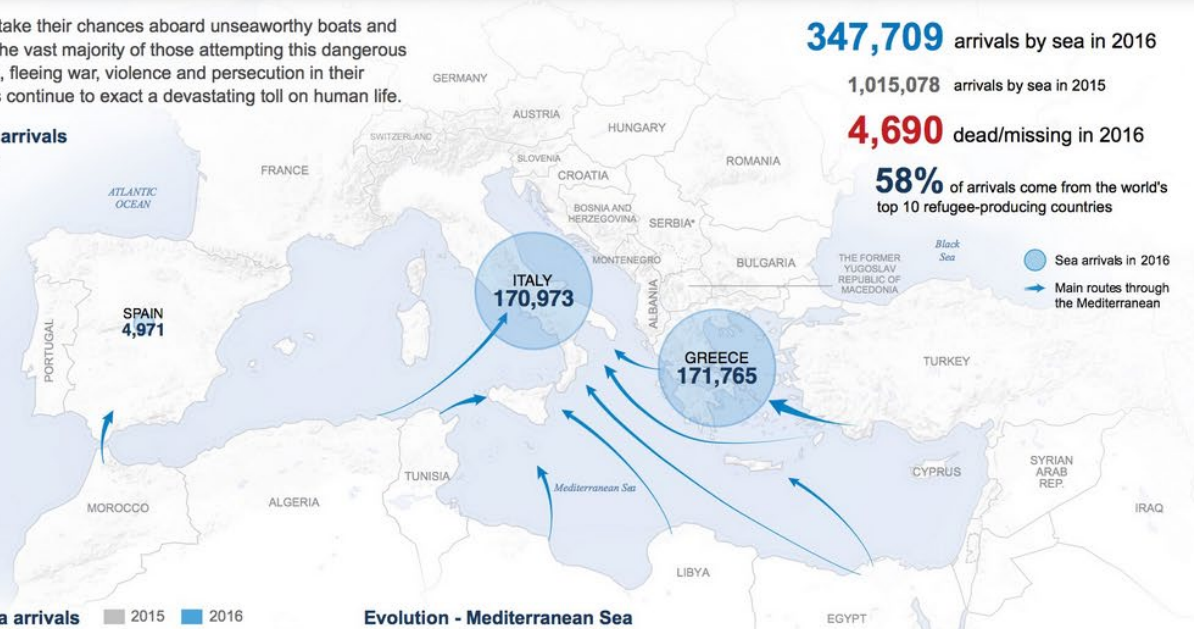


347,709 arrivals by sea in 2016

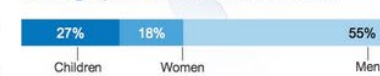
1,015,078 arrivals by sea in 2015

4,690 dead/missing in 2016

58% of arrivals come from the world's top 10 refugee-producing countries



Demographics based on arrivals since 1 Jan 2016



*Serbia (AND KOSOVO: S/RES/1244 (1999))

The boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by the United Nations

[Click here to view sources and disclaimer](#)

13 types of data displays that are, unfortunately, all called “dashboards”

Dynamic Data Displays

Dynamically generated based on updating data

Usually...

- For enabling employees, customers, partners etc. to interact with an organization's data
- Subdued, plain visual design
- Little/no storytelling (rarely possible)
- Interactive, sometimes complex
- Primary purpose is to answer data-related questions

Monitoring displays

Status displays ✓
Metric introduction displays ✓
Metric diagnostic displays ✓
Alert displays ✓

Performance displays

Performance overview displays ✓
KPI detail displays ✓

Item browsing displays

Disaggregated item displays ✓
Aggregated item displays ✓
Item detail displays ✓

Canned analysis displays

Various types ✓

Static Data Displays

Custom-made based on a static snapshot of data



Usually ...

- Used inside and outside of organizations (training, marketing, public awareness, etc.)
- Eye-catching, creative visual design
- Involves storytelling
- Very basic interactivity, or none
- Primary purpose is to cause a desired change in the mind of an audience

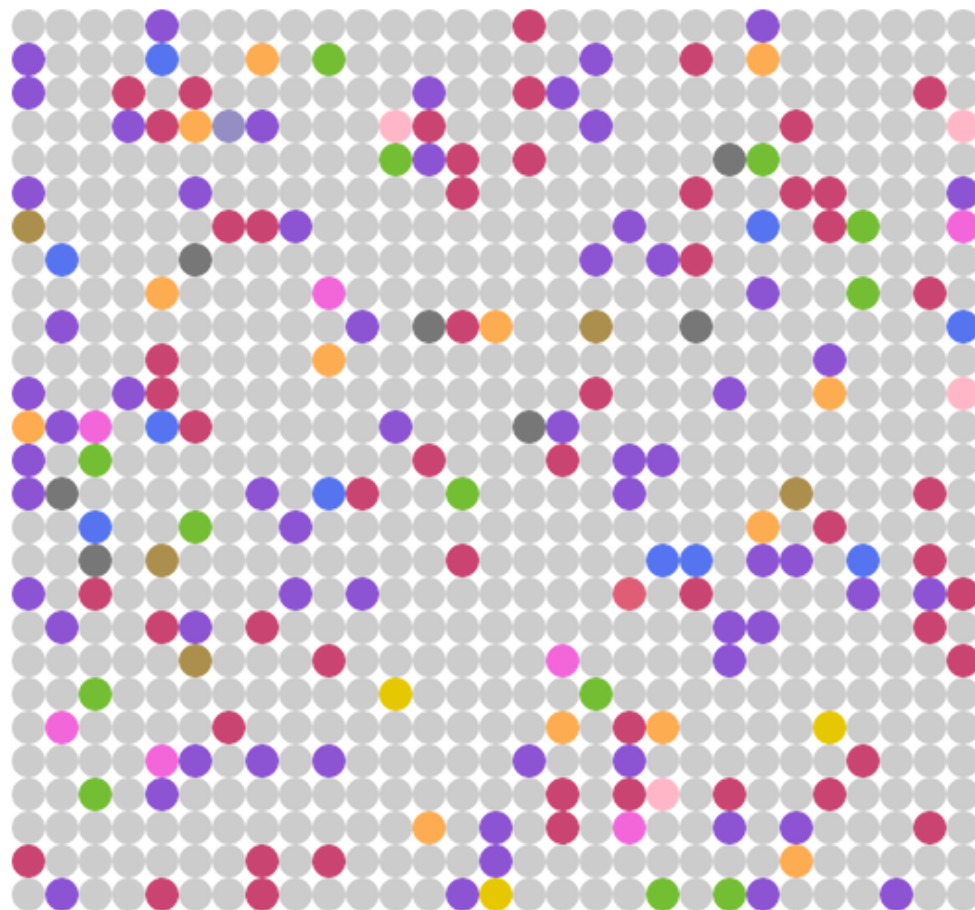
Persuasion displays ✓
Explanation displays ✓
Engagement displays ←

Engagement displays

- *Primarily* for generating awareness and interest in a dataset among as many people as possible
- Effectiveness gauged *primarily* based on views, clicks, likes, comments, etc.

I am **female**  **White**  and currently **34** years old.

LIVE



AGE OF DEATH

68 years

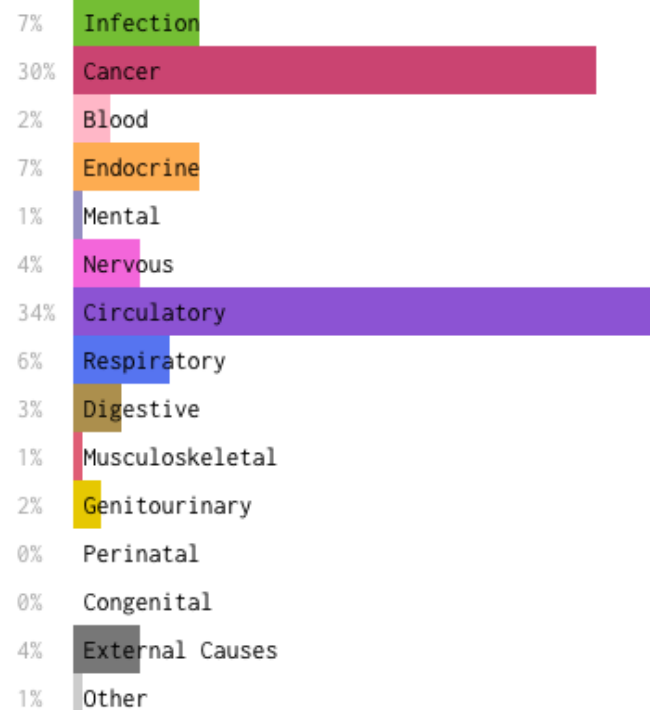
DIED SO FAR

23%

STILL ALIVE

77%

CAUSE OF DEATH SO FAR



Source: <https://flowingdata.com/2016/01/19/how-you-will-die/>

13 types of data displays that are, unfortunately, all called “dashboards”

Dynamic Data Displays

Dynamically generated based on updating data

Usually...

- For enabling employees, customers, partners etc. to interact with an organization's data
- Subdued, plain visual design
- Little/no storytelling (rarely possible)
- Interactive, sometimes complex
- Primary purpose is to answer data-related questions

Monitoring displays

Status displays ✓
Metric introduction displays ✓
Metric diagnostic displays ✓
Alert displays ✓

Performance displays

Performance overview displays ✓
KPI detail displays ✓

Item browsing displays

Disaggregated item displays ✓
Aggregated item displays ✓
Item detail displays ✓

Canned analysis displays

Various types ✓

Static Data Displays

Custom-made based on a static snapshot of data

Usually ...

- Used inside and outside of organizations (training, marketing, public awareness, etc.)
- Eye-catching, creative visual design
- Involves storytelling
- Very basic interactivity, or none
- Primary purpose is to cause a desired change in the mind of an audience

Persuasion displays ✓
Explanation displays ✓
Engagement displays ✓

“Dashboard”?

13 types of data displays that are, unfortunately, all called “dashboards”

Dynamic Data Displays

Dynamically generated based on updating data

Usually...

- For enabling employees, customers, partners etc. to interact with an organization's data
- Subdued, plain visual design
- Little/no storytelling (rarely possible)
- Interactive, sometimes complex
- Primary purpose is to answer data-related questions

Monitoring displays

Status displays
Metric introduction displays
Metric diagnostic displays
Alert displays

Performance displays

Performance overview displays
KPI detail displays

Item browsing displays

Disaggregated item displays
Aggregated item displays
Item detail displays

Canned analysis displays

Various types

Static Data Displays

Custom-made based on a static snapshot of data

Usually ...

- Used inside and outside of organizations (training, marketing, public awareness, etc.)
- Eye-catching, creative visual design
- Involves storytelling
- Very basic interactivity, or none
- Primary purpose is to cause a desired change in the mind of an audience

Persuasion displays
Explanation displays
Engagement displays

13 types of data displays that are, unfortunately, all called “dashboards”

Dynamic Data Displays

Dynamically generated based on updating data

Usually...

- For enabling employees, customers, partners etc. to interact with an organization's data
- Subdued, plain visual design
- Little/no storytelling (rarely possible)
- Interactive, sometimes complex
- Primary purpose is to answer data-related questions

Monitoring displays

Status displays
Metric introduction displays
Metric diagnostic displays
Alert displays

Performance displays

Performance overview displays
KPI detail displays

Item browsing displays

Disaggregated item displays
Aggregated item displays
Item detail displays

Canned analysis displays

Various types

Static Data Displays

Custom-made based on a static snapshot of data

Usually ...

- Used inside and outside of organizations (training, marketing, public awareness, etc.)
- Eye-catching, creative visual design
- Involves storytelling
- Very basic interactivity, or none
- Primary purpose is to cause a desired change in the mind of an audience

Persuasion displays
Explanation displays
Engagement displays

13 types of data displays that are, unfortunately, all called “dashboards”

Dynamic Data Displays

Dynamically generated based on updating data

Usually...

- For enabling employees, customers, partners etc. to interact with an organization's data
- Subdued, plain visual design
- Little/no storytelling (rarely possible)
- Interactive, sometimes complex
- Primary purpose is to answer data-related questions

Monitoring displays

Status displays
Metric introduction displays
Metric diagnostic displays
Alert displays

Performance displays

Performance overview displays
KPI detail displays

Item browsing displays

Disaggregated item displays
Aggregated item displays
Item detail displays

Canned analysis displays

Various types

Static Data Displays

Custom-made based on a static snapshot of data

Usually ...

- Used inside and outside of organizations (training, marketing, public awareness, etc.)
- Eye-catching, creative visual design
- Involves storytelling
- Very basic interactivity, or none
- Primary purpose is to cause a desired change in the mind of an audience

Persuasion displays
Explanation displays
Engagement displays

13 types of data displays that are, unfortunately, all called “dashboards”

Dynamic Data Displays

Dynamically generated based on updating data

Usually...

- For enabling employees, customers, partners etc. to interact with an organization's data
- Subdued, plain visual design
- Little/no storytelling (rarely possible)
- Interactive, sometimes complex
- Primary purpose is to answer data-related questions

Monitoring displays

Status displays
Metric introduction displays
Metric diagnostic displays
Alert displays

Performance displays

Performance overview displays
KPI detail displays

Item browsing displays

Disaggregated item displays
Aggregated item displays
Item detail displays

Canned analysis displays

Various types

Static Data Displays

Custom-made based on a static snapshot of data

Usually ...

- Used inside and outside of organizations (training, marketing, public awareness, etc.)
- Eye-catching, creative visual design
- Involves storytelling
- Very basic interactivity, or none
- Primary purpose is to cause a desired change in the mind of an audience

Persuasion displays
Explanation displays
Engagement displays

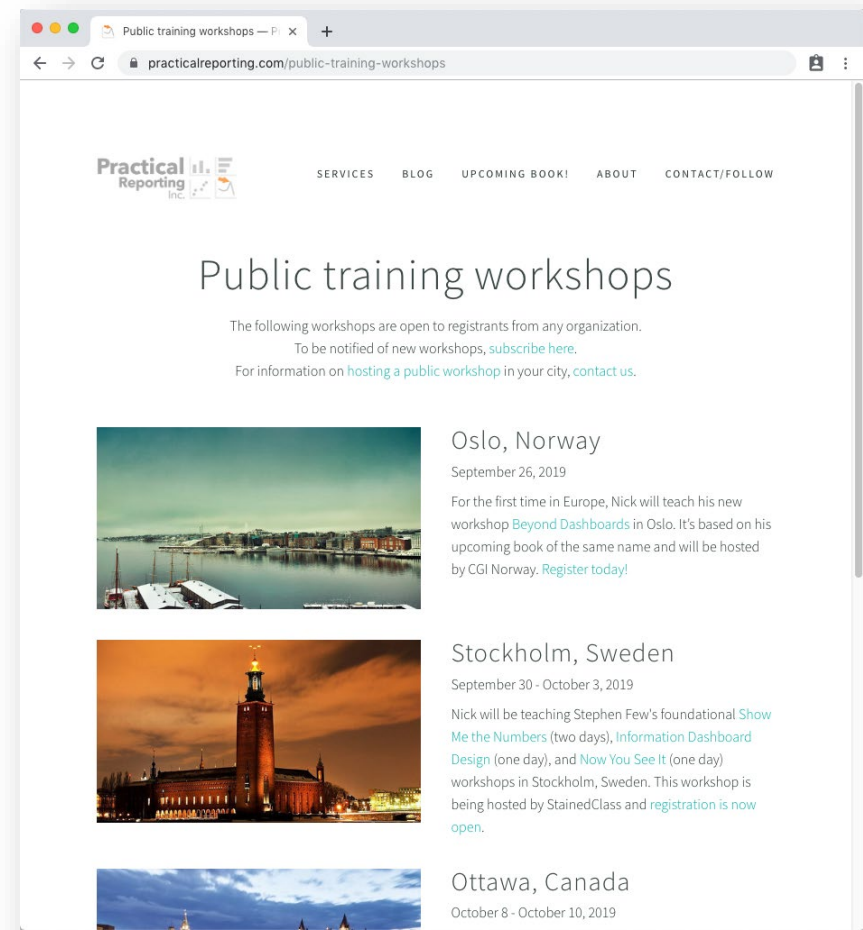
A white book with the title 'Beyond Dashboards' in bold, black, sans-serif font. The book is lying on a gray surface, angled towards the bottom right. The title is centered on the front cover.

Beyond Dashboards

Upcoming Beyond Dashboards open-registration workshops

- Sept. 26, Oslo, Norway
- Nov. 7, Ottawa, Canada
- May 11-12, 2020, Stockholm, Sweden

practicalreporting.com



The screenshot shows a web browser window with the URL practicalreporting.com/public-training-workshops. The page features the Practical Reporting Inc. logo and a navigation menu with links for SERVICES, BLOG, UPCOMING BOOKS, ABOUT, and CONTACT/FOLLOW. The main heading is "Public training workshops". Below this, a paragraph states: "The following workshops are open to registrants from any organization. To be notified of new workshops, [subscribe here](#). For information on [hosting a public workshop](#) in your city, [contact us](#)."

Oslo, Norway
September 26, 2019
For the first time in Europe, Nick will teach his new workshop [Beyond Dashboards](#) in Oslo. It's based on his upcoming book of the same name and will be hosted by CGI Norway. [Register today!](#)

Stockholm, Sweden
September 30 - October 3, 2019
Nick will be teaching Stephen Few's foundational [Show Me the Numbers](#) (two days), [Information Dashboard Design](#) (one day), and [Now You See It](#) (one day) workshops in Stockholm, Sweden. This workshop is being hosted by StainedClass and [registration is now open](#).

Ottawa, Canada
October 8 - October 10, 2019

Thank you!



info@practicalreporting.com



search for “Nick Desbarats”



@nickdesb

Workshop info, blog posts, email list:

www.practicalreporting.com



© 2019 Practical Reporting Inc.