

# Effektive Datenvisualisierung mit Dashboards

Digitaldialog, 24.11.2015

DI (FH) Robert Möstl



Es geht um  
Situational Awareness

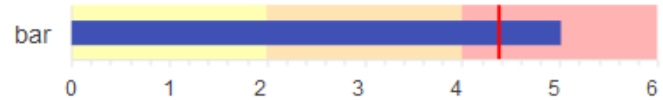
**"A dashboard is a visual display of the most important information needed to achieve one or more objectives that have been consolidated on a single computer screen so it can be monitored at a glance."**

– Stephen Few in *Information Dashboard Design*

# 8 Häufige Fehler

# 1. Fokus auf Effekte

# Gauges vs. Bullet Graphs



# Platzproblem durch falsche Graphen



3 Messwerte



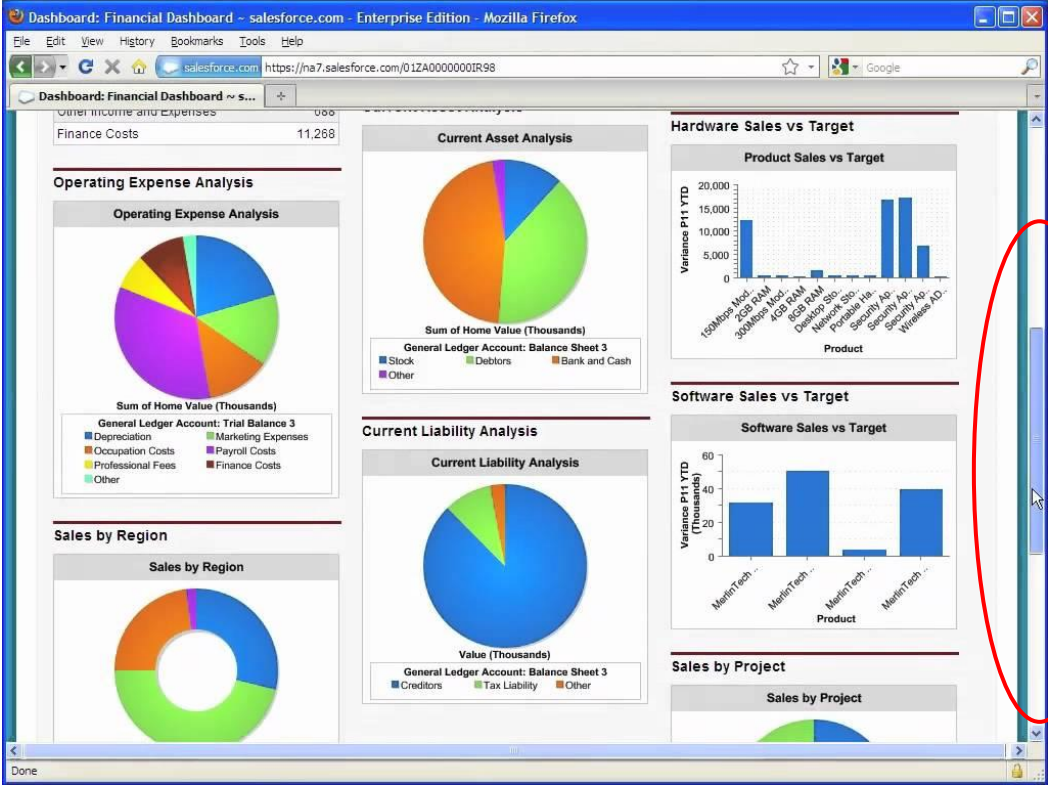
# Platzsparende Graphen verwenden



12 Messwerte

## 2. Größer als ein Screen

# Scrolling vermeiden



Visual Memory

# Navigation vermeiden

Find Employees

Dashboard | Manager Input | Mass Update | Review History | Review Status | Objective

Dashboard: Jerry Adlemson Job Title: Tenured Rep Email: jerry.adlemson@forcelogixdemo.com Manager: Karen Andersen

Selected Item Details

First Name: Jerry  
Last Name: Adlemson  
Email: jerry.adlemson@forcelogixdemo.com  
Job Title: Tenured Rep

Select Employee

Team

- Adlemson, Jerry
- Austen, Jane
- Boyd, Bill
- Boyd, Jim
- Chan, Alex
- Cisco, Ella
- Devroy, Gary
- Elverson, Allen
- Fragrassi, Cameron
- Giordano, Amy
- Goodman, Jim
- Gunn, Jane
- Hendricks, Micheal
- Jacobson, Brian
- James, Gerry
- Johnson, Tony
- Kaponia, Todd
- McTill, Brenden
- Mellonkoff, Mike
- Miller, Tom
- Nemith, Joe
- Newby, Maggie
- Newton, Michael

Category

Category	Category Weight	SPI Weighted Score	Ranking Score
Activities	10.00	90.1600	9.0200
Pipeline	15.00	92.2500	13.8300
Results	40.00	100.8500	40.3400
Effectiveness	20.00	65.1900	13.0400
Manager Input	15.00	63.4000	9.5100
Overall Ranking	100%		85.74

Review Period: 2008 January  
Date Updated: 03/11/2008 06:00 PM

Coaching History | Update SPI

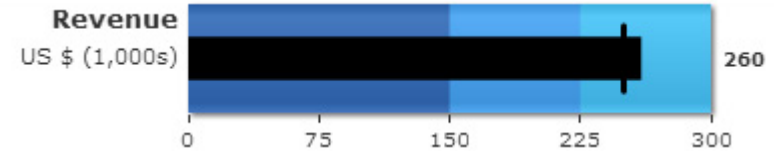
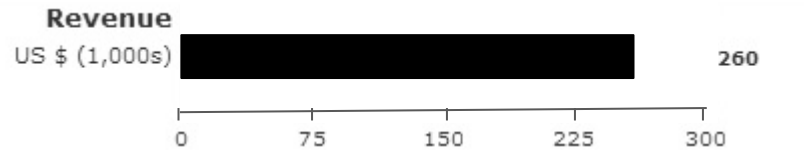
Activities 90.16% | Pipeline 92.2% | Results 100.86% | Effectiveness 65.19% | Manager Input 43.4%

SPIs

Assignment	Score	Weight	Assignment	Score	Weight	Assignment	Score	Weight	Assignment	Score	Weight	Assignment	Score	Weight
Outbound calls	100.0%	20	New proposals	100.0%	20	Credits>Returns	100.0%	10	Forecast accuracy	100.0%	30	Attitude/initiative	100.0%	25
Prospect visits	78.2%	20	Opportunities by Type	100.0%	30	Bookings - YTD	100.0%	30	Close ratios	112.2%	10	Resource utilization	80.0%	25
Customer visit	57.5%	30	Customer up-sell opps.	100.0%	20	Margin/Profitability	88.6%	30	Year to year growth	100.0%	10	Business acumen	1.2%	25
Executive meetings	100.0%	30	Total Forecast	100.0%	30	Bookings - QTD	107.0%	30	Balanced bookings	111.0%	30	CRM updates	72.5%	25
									Product mix	10.4%	20			

Show Details | Objectives | Show Detail  
Show Details | Coaching History | Show Detail  
Show Details | Reports | Show Detail  
Show Details | Calculations | Show Detail

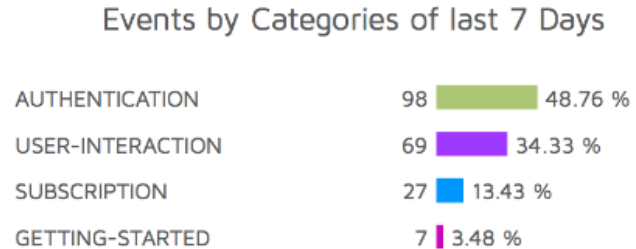
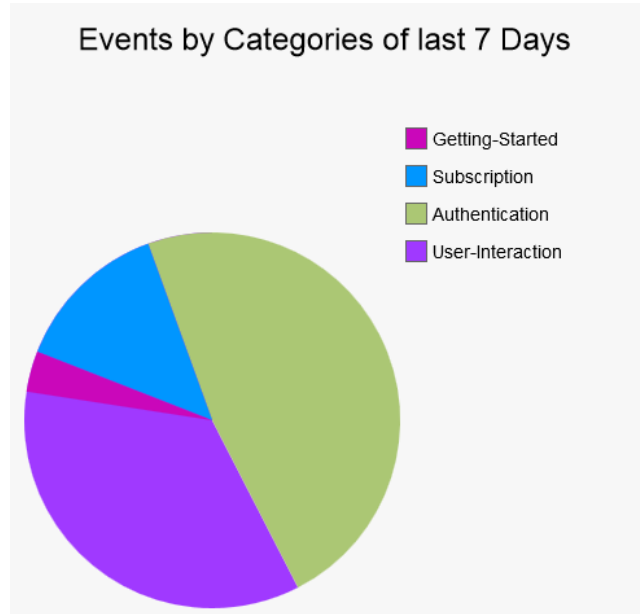
### 3. Messwerte ohne Kontext



Kontext ermöglicht Interpretation

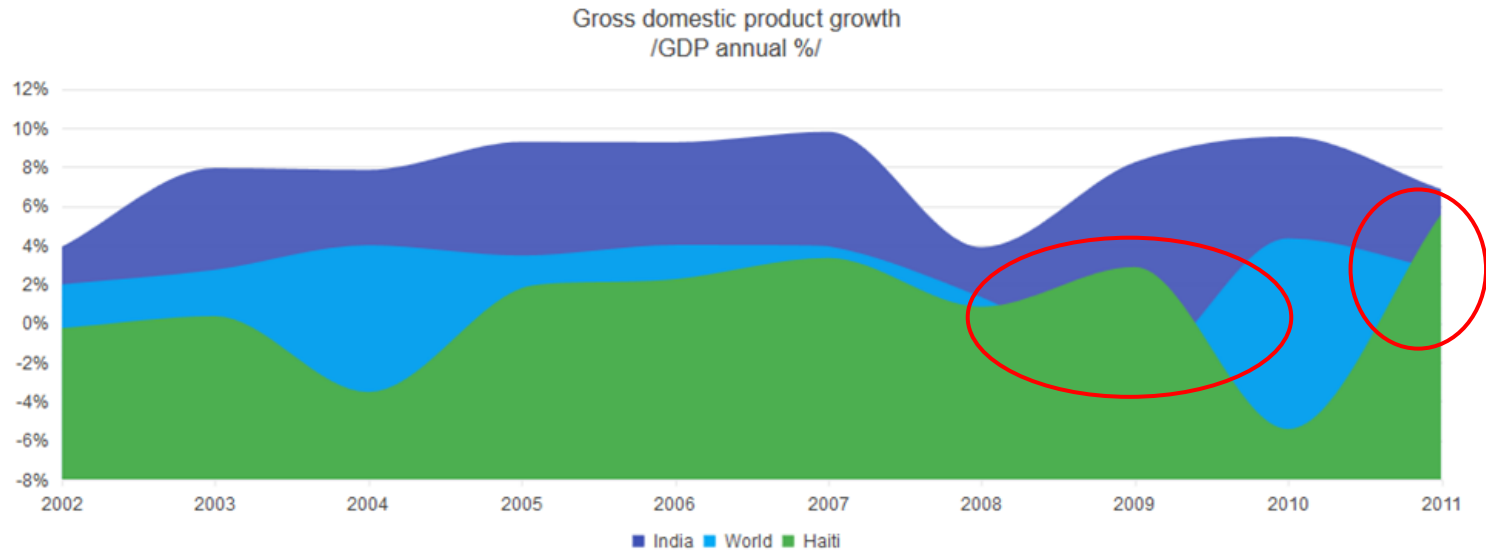
## 4. Ineffiziente Graphen

# Bar Charts anstatt Pie Charts verwenden



Pre-attentive Visual Processing

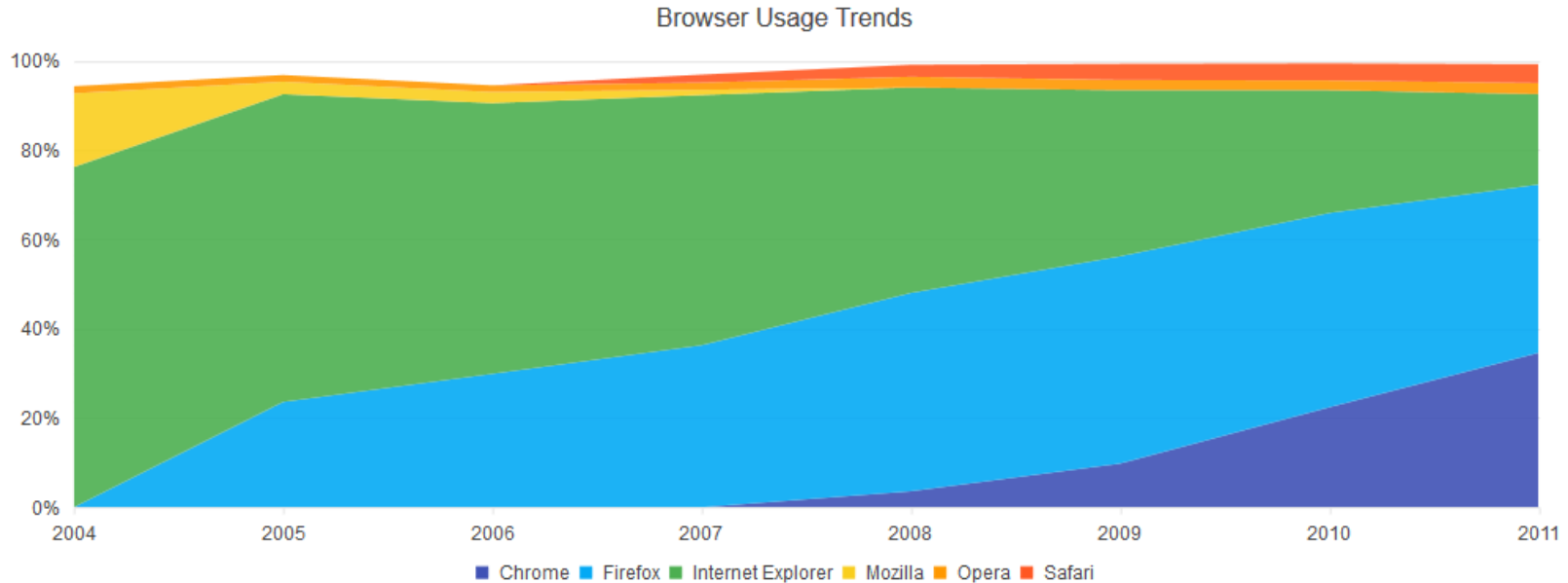
# Area Charts statt Line Charts



Areas können sich überlappen

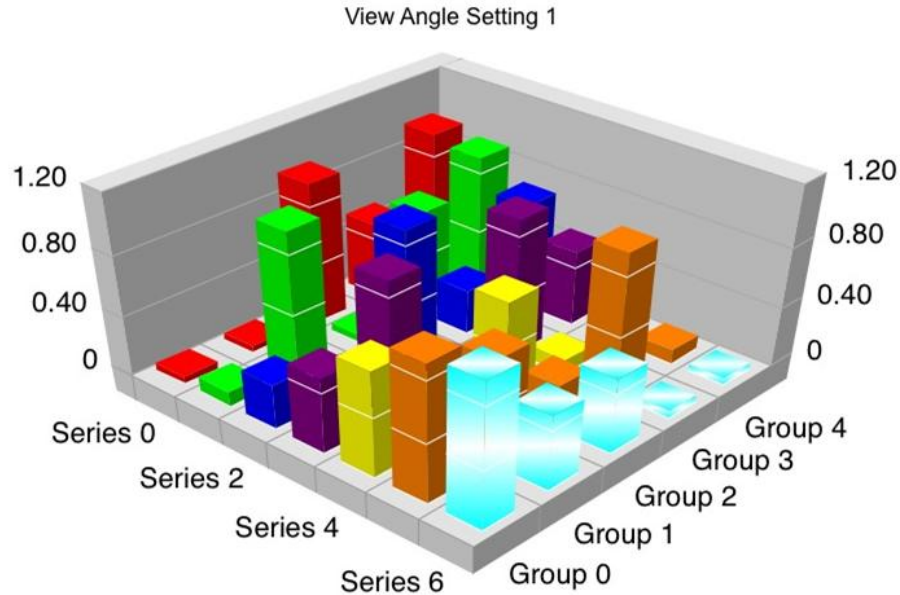


# Stacked Area Charts statt Line Charts



Historischer Verlauf wird verzerrt

# 5. 3D Charts



Überlappungen und Vergleiche erschwert

## 6. Falscher Einsatz von Farben

# Zu wenig Farbe

55058485411428865830  
40647646665124008863  
17817326667221805721  
68227372718118867678  
73758720863737054156  
14513012002238031838  
31000084337623486626

Wie oft kommt die Ziffer 5 vor?

# Zu viel Farbe

55058485411428865830  
40647646665124008863  
17817326667221805721  
68227372718118867678  
73758720863737054156  
14513012002238031838  
31000084337623486626

Kodierung in den beliebten Ampelfarben

# Moderater Einsatz von Farbe

55058485411428865830  
40647646665124008863  
17817326667221805721  
68227372718118867678  
73758720863737054156  
14513012002238031838  
31000084337623486626

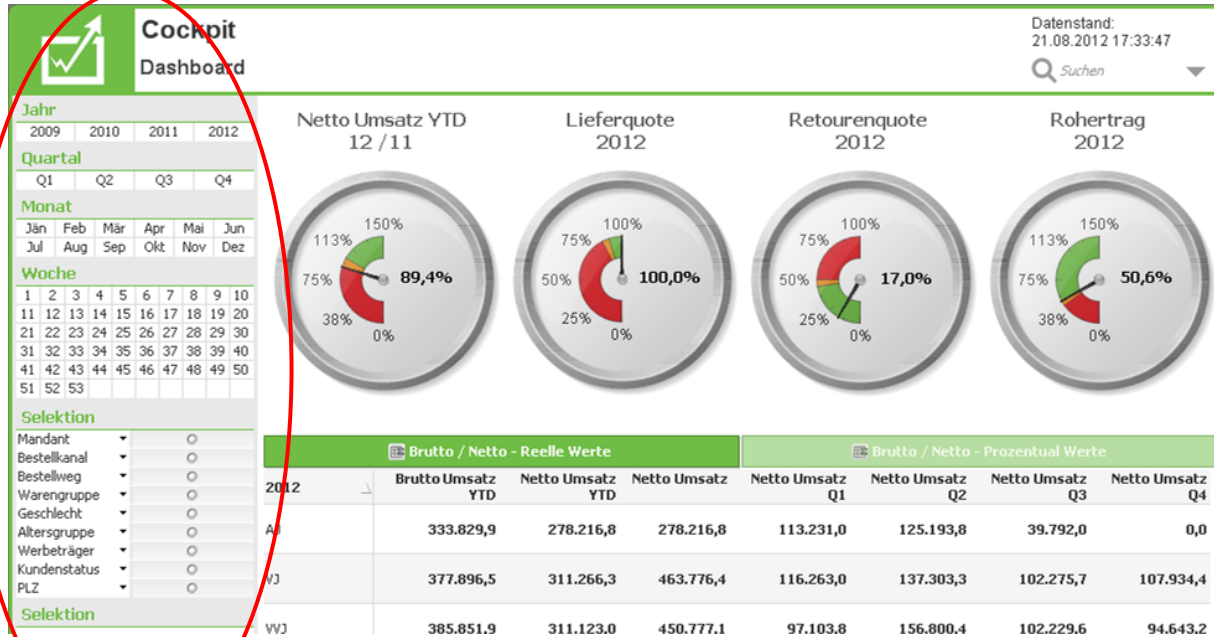
Nur Farbe für “exceptional states”

## 7. Hintergrundbilder



Farbtonintensität wird von Umgebung beeinflusst

# 8. Zu viel Dynamik



Dynamik erschwert schnellen Überblick



# Zusammenfassung häufiger Dashboard Fehler

1. Fokus auf Effekte
2. Größer als ein Screen
3. Messwerte ohne Kontext
4. Ineffiziente Graphen
5. 3D Charts
6. Falscher Einsatz von Farben
7. Einsatz von Hintergrundbildern
8. Zu viel Dynamik

# Danke für die Aufmerksamkeit

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