Module 12
Design Problems for Real-Time Operational Dashboards

Problems with real-time operational dashboards

- **Too much complexity**
- **Too many alert conditions**
- **Alerts that cannot be differentiated**
- **Overwhelming visuals**
- **Distracting visuals**
- **Inappropriate visual salience**

Problems with real-time operational dashboards

- **Mismatch between information and its visual representation**
- **Indirect expression of measures**
- **Not enough context**

Information overload or complexity

Impact of too much information or complexity
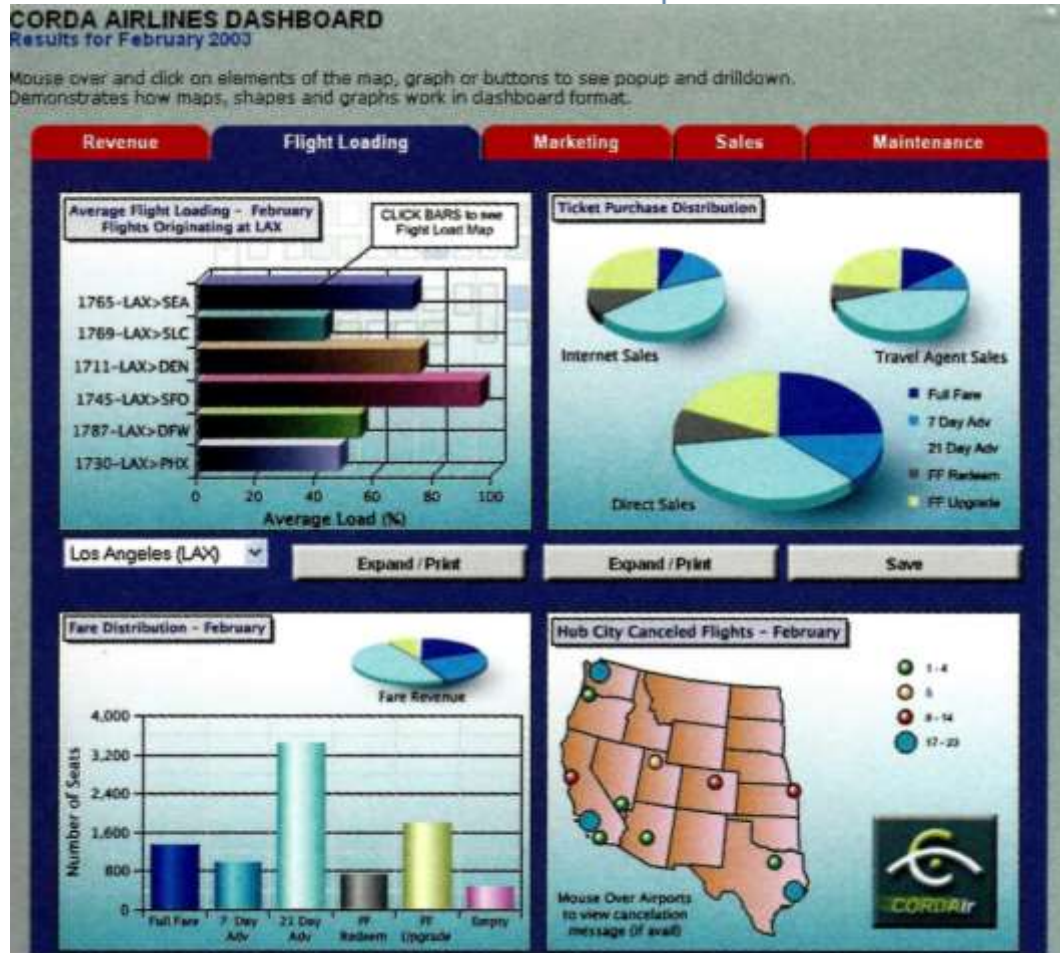**Information that should not be displayed**

Figure 107: Dashboard with clutter of instructions
Source: Information Dashboard Design, Few

Alerts and Visuals

- **Alerts**
  - Avoid too many alerts
  - Differentiating alerts

- **Overwhelming and distracting visuals**
  - Avoid overwhelming visuals
  - Best use of color on a dashboard
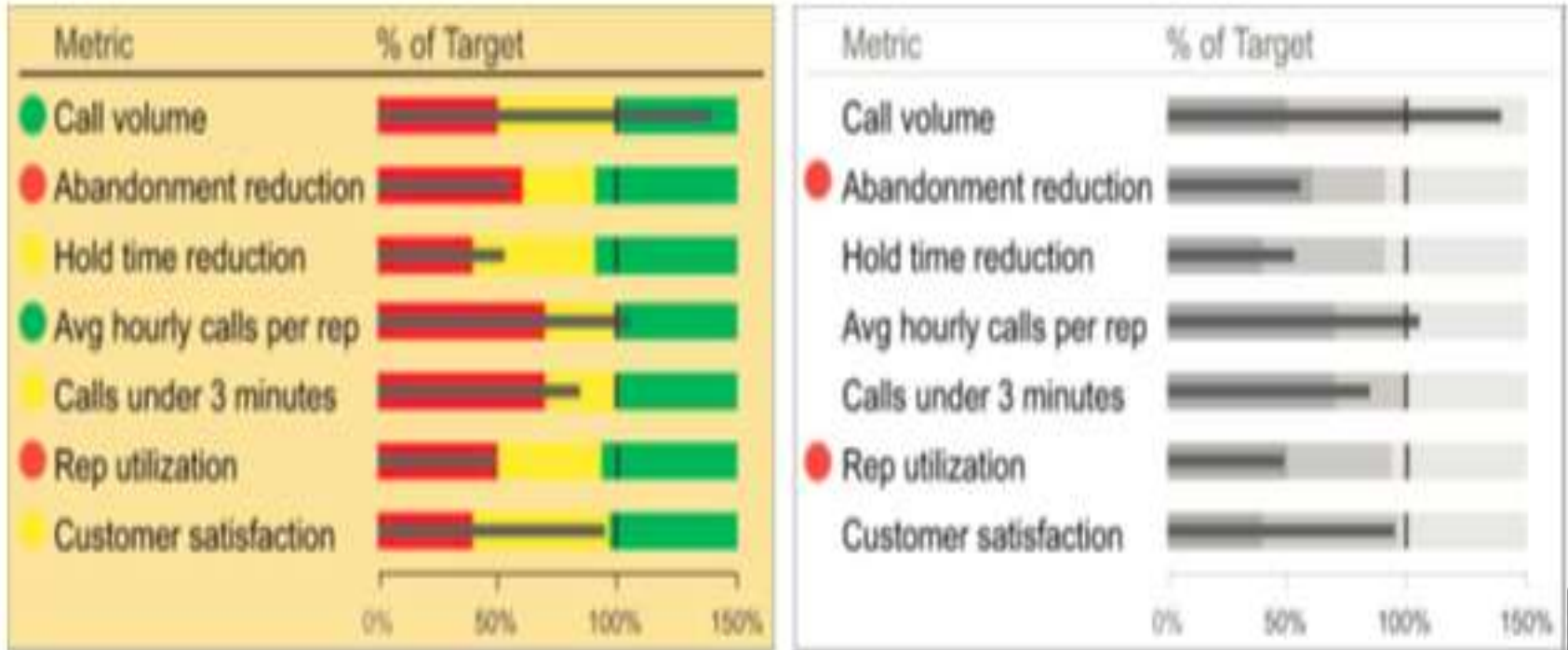
Appropriate versus excessive use of color

Figure 108: Appropriate versus excessive use of color
Source: Dashboard design for real-time situation awareness, Stephen Few

Appropriate versus excessive use of color

Figure 109: Appropriate versus excessive use of color
Source: Information Dashboard Design, Few

Avoiding distracting visuals

Figure 110: Inappropriate design for a business dashboard
Source: Dashboard design for real-time situation awareness, Stephen Few

Visual salience

Avoid inappropriate visual salience
What to keep in mind when designing a dashboard
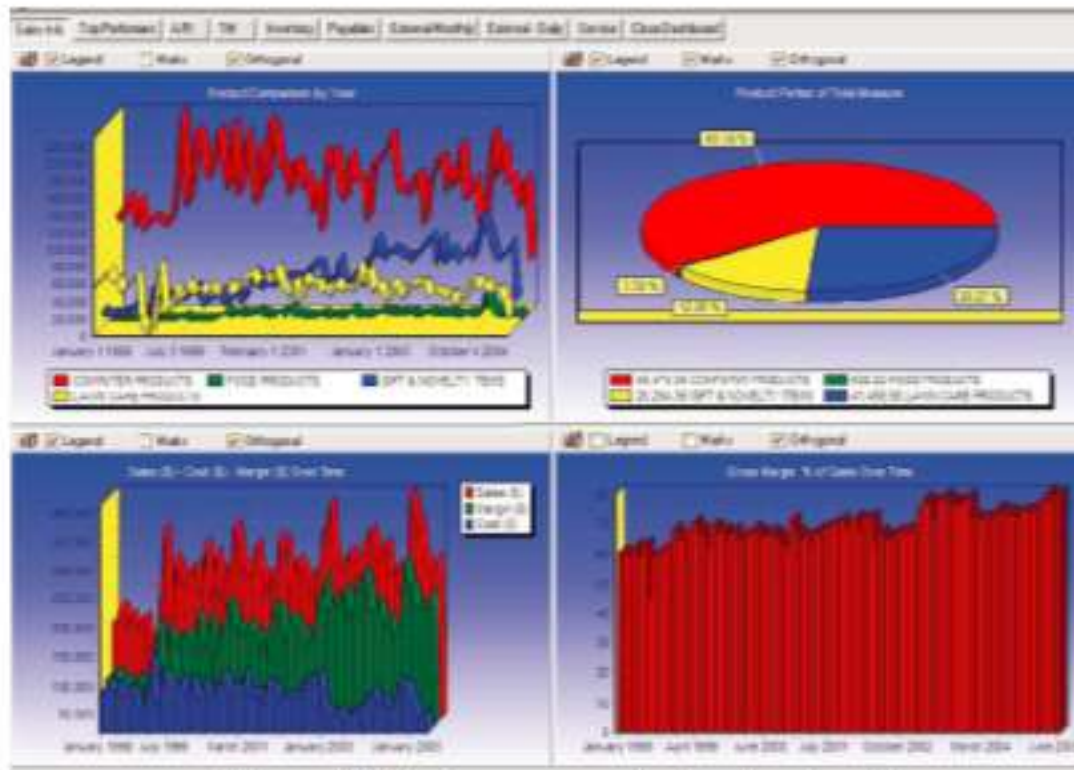Example of inappropriate visual salience

Figure 111: Inappropriate visual salience
Source: Dashboard design for real-time situation awareness, Few

Information and its visual representation

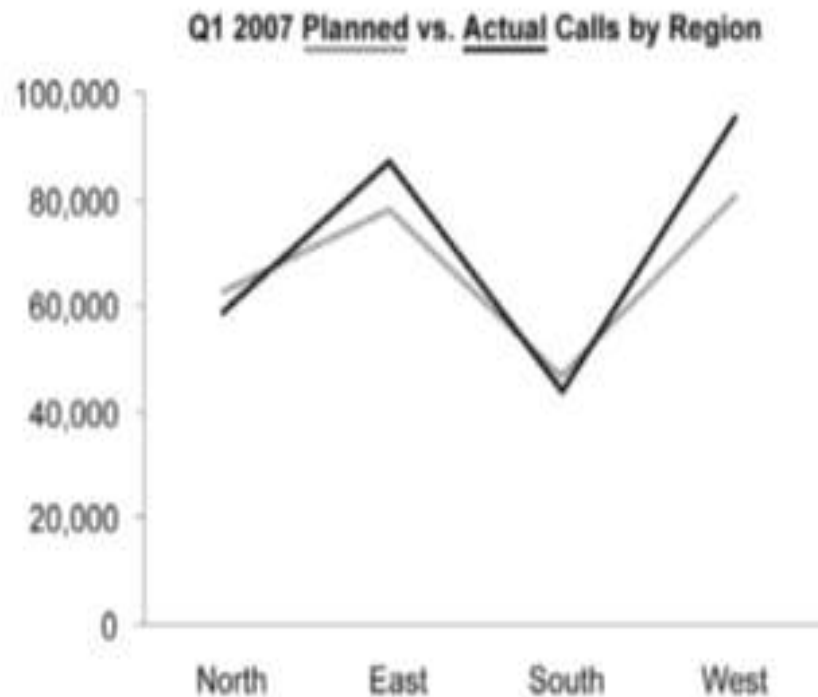Avoid mismatch between information and its visual representation

Q1 2007 Planned vs. Actual Calls by Region

Figure 112: Mismatch between data and its graphical representation
Source: Dashboard design for real-time situation awareness, Stephen Few

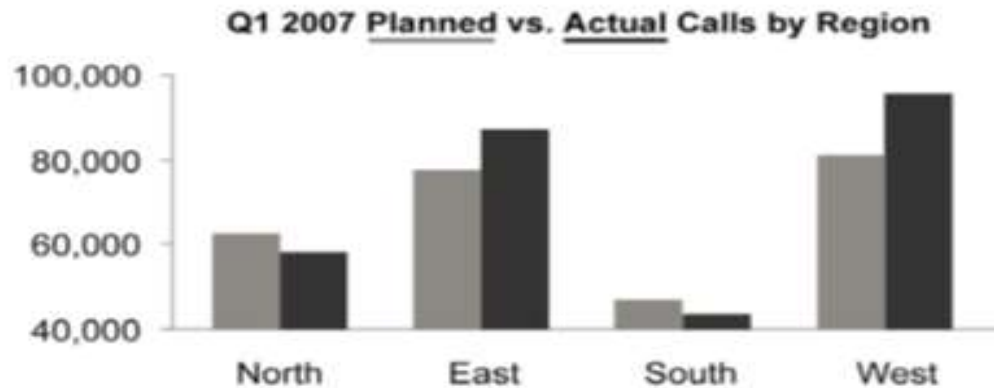# *Information and its visual representation*

Figure 113: Another view of planned versus actual data
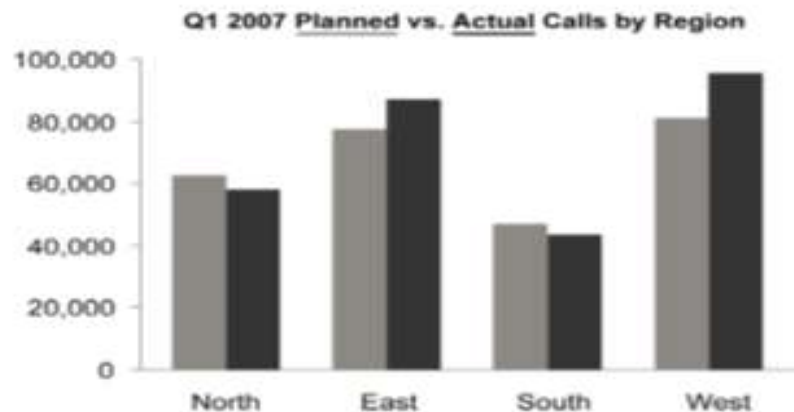Source: Dashboard design for real-time situation awareness, Few

Figure 114: Bar graph starting with a zero scale
Source: Dashboard design for real-time situation awareness, Few

Measures and context

Expressing measures indirectly

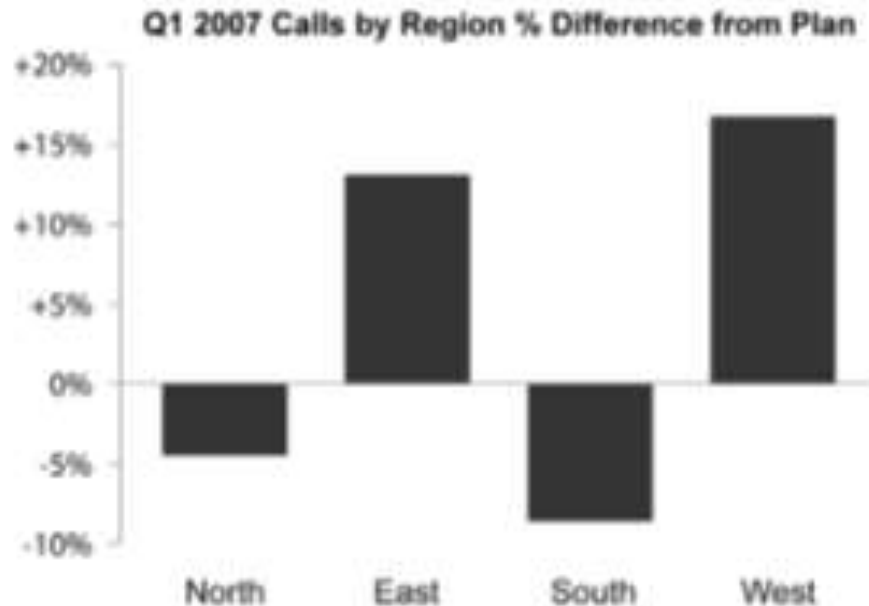Q1 2007 Calls by Region % Difference from Plan

Figure 115: Performance expressed as a percentage
Source: Dashboard design for real-time situation awareness, Few

Measures and context

Provide context

Figure 116: Chart with no context
Source: Dashboard design for real-time situation awareness, Few

Figure 117: Chart with context
Source: Dashboard design for real-time situation awareness, Few
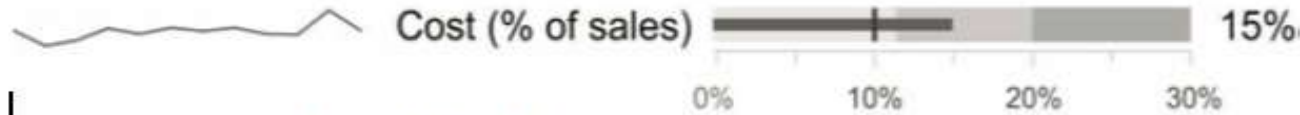
Bullet graph

Figure 118: Bullet graph
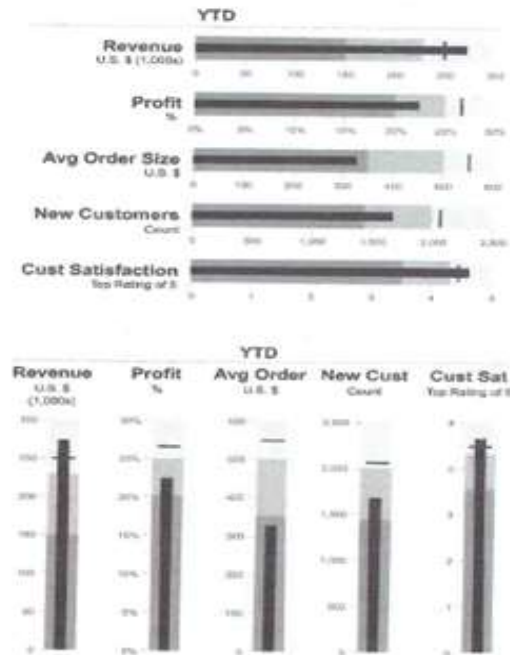Source: Dashboard design for real-time situation awareness, Stephen Few

Figure 119: Bullet graph: Horizontal versus vertical
Source: Information Dashboard Design, Few
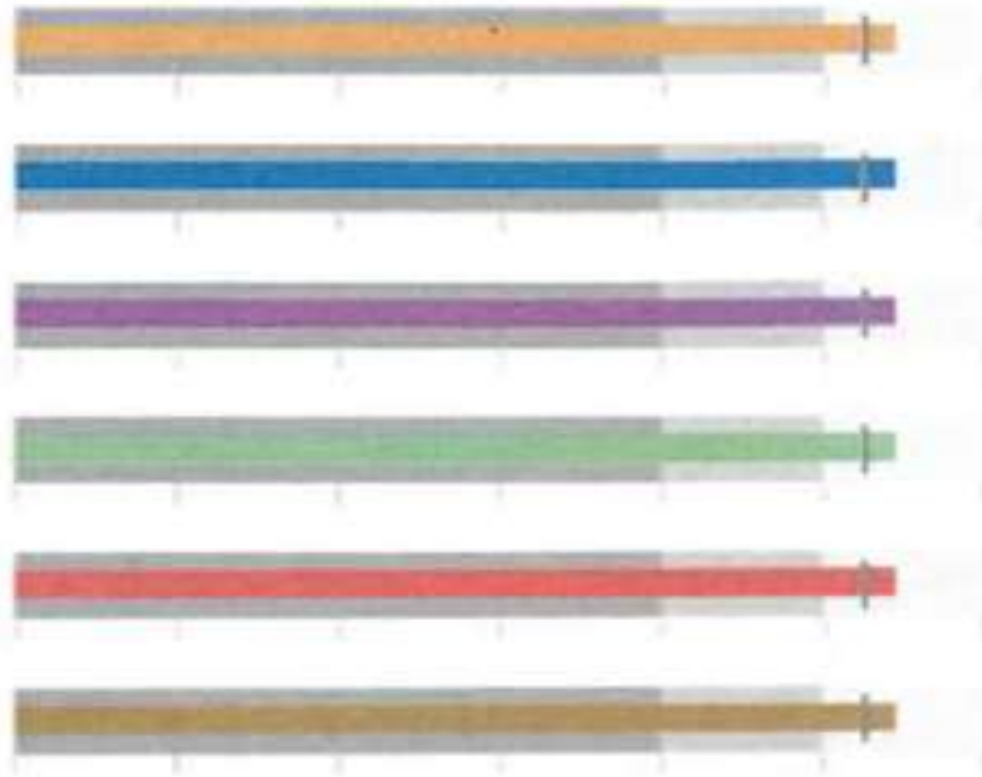
14

Bullet graph with colors

Figure 120: Bullet graph using colors
Source: Information Dashboard Design, Few