DESTINATION: DIGITAL

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Data to Beautiful Dashboards in a New York Minute

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Agenda

1. Visual Design Best Practices

2. Examples
   - Dashboards
   - Themes

3. Exercise
Dashboard Design

Understand and Prep the Data
• Rapid data merge, calculations

Design the Dashboard – Laptop, Tablet
• Cross-sectional and Longitudinal
• Brush linking: mark, filter, drill
• Invest time to storyboard - on paper

Determine Graph Types and Layout
• Continuous, categorical variables
• Time series and spatial data
• Avoid chartjunk but make appealing to view

Control the Graph Elements
• Themes, colors, design
• Labels, units
• Avoid chartjunk but make appealing to view

First impression matters!
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Focus on Usability

Design matters

Provide Descriptive Content

Hide Unnecessary Content

On the community visual design best practice page: https://community.tibco.com/wiki/spotfire-visual-design-best-practice#toc-6

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Cheat Sheet: Dashboard Design

- Design visualizations that respond to the business requirements
- Design for the display device – projector, computer, tablet, paper, …
- Have a clear flow from visualization to visualization and test your marking logic within that flow.
- Tell your story from the left to the right, top to bottom
  - Cross-sectional on top (current status), longitudinal along the bottom (how did we get here)
- Select the correct chart for the given data (e.g. line charts for time series)
- Use Pie Chart sparingly – not too many categories
- Label axes and include units
- Use consistent colors and fonts for all visualizations across all tabs.
- Use Color meaningfully, not for decoration. Use as few colors as possible. Colors have to fit well together.
- Use multiple scales as appropriate – watch out for misleading scales
- Format numeric values appropriately for labels, tooltips, axis scale labels
- Add Action Controls, Document Properties, Bookmarks, Annotations, Conversations for better usability
- Reorder columns in your data set when possible
- Try to control all settings via style editor. Do not overwrite on the visualization level

On the community visual design best practice page: https://community.tibco.com/wiki/spotfire-visual-design-best-practice#toc-6
Select the correct chart for the given data

More about selecting the correct chart:
Designing Effective Tables and Graphs

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**Scaling**

**Volume Sales, Value Sales - Date**

- **Misleading scaling**

**Changes relative to start**

- **Make the scaling relative and show on a single axis**

- **Use trellis to separate the trends**
Color – Use Meaningfully

• KEEP IT SIMPLE AND CONSISTENT

• Use consistent colors

• Use as few colors as possible. They have to fit well together.

• Use intense colors only when you wish to draw attention to specific data.

• Use the same color, except when color differences are needed to indicate differences in the data or encode a dimension

• Use a single, neutral background color (if needed at all)
Color – Reusable color schemes

CATEGORICAL:

CONTINUOUS:
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Coordinated colors
Choosing effective colour schemes for thematic maps is surprisingly difficult. ColorBrewer is an online tool designed to take some of the guesswork out of this process by helping users select appropriate colour schemes for their specific mapping needs by considering the number of data classes; the nature of their data (matched with sequential, diverging and qualitative schemes); and the end-use environment for the map (e.g., CRT, LCD, printed, projected, photocopied). ColorBrewer contains 'learn more' tutorials to help guide users, prompts them to test-drive colour schemes as both map and legend, and provides output in five colour specification systems.
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Dark Themes - work well with simple dashboards
Before ...

Simulation Settings

- Offer Starts: 22/06/2013
- Offer Ends (days): 1
- Offer Impact (sales multiplier): 5
- Additional quantities on Campaign start: 500
- Scenario Name: S2

Save Scenario | Reset Scenarios

... after ...

Simulation Settings

- Offer Starts: 22/06/2013
- Offer Ends (days): 1
- Offer Impact (sales multiplier): 5
- Additional quantities on Campaign start: 500
- Scenario Name: S2

Save Scenario | Reset Scenarios
Example: first row of the table

```
<table cellpadding = "10">
<tr>
<td>
<font face = "Calibri" size = "2"><strong>Offer</strong> Starts</font>
</td>
<td>
<SpotfireControl id="9a423a08879d4dc98fad7274d3fad0ed" />
</td>
</tr>
</table>
```
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Exercise
Clean and nice design
Key takeways

- Color should be used meaningfully, not for decoration
- Use multiple scales as appropriate
- Tell your story from the left side of your page to the right bottom corner
- Hide unnecessary content

- Use as few colors as possible. Colors have to fit well together
- Format numeric values appropriately for labels, tooltips, axis scale labels
- Add text to “If no items are marked...” if Details visualization is blank by default
- Give visualization titles descriptive names or turn off if not needed
- Hide unused Filter Panel elements
- Consider moving relevant filters to a text box
- Turn off legend if not needed or turn off items individually
- ....
Takeaways

1. Use color meaningfully
2. Hide unnecessary content
3. Use multiple scales as appropriate
4. Tell your story from the left side of your page to the right bottom corner
5. Consider adding KPI`s
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