Tableau Demo

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Institutional Research
Agenda

• Introduction to Institutional Research

• What is Tableau?

• Why Visualizations?

• Demo of Tableau
Institutional Research

Brian Beacham – Director
Janet Latter – Manager Analytics and Business Intelligence
Patris Aghakian – Information Architect
Sherry Pidperyhora – Research Analyst
Alexandra Cai – Research Analyst
Our Mandate

• Provide analytic, statistical and research support to the college community
• Provide quality college information products and initiate research for development, planning, and review
• To be responsible for the collection, analysis, interpretation and dissemination of accurate information, in compliance with government reporting requirements
• To enable Leadership to use data, information and insight as a strategic resource
• Provide direction and support in strategic planning
To enhance evidence-based decision making
What is Tableau?

• A data exploration and visualization tool
• It provides visuals that enhance user natural ability to spot visual patterns
• Delivers interactive dashboards that support “insights on the fly”
• Allows you to ask questions, spot trends and identify opportunities
• Connects to SQL databases, spreadsheets, and flat files
Tableau Technologies

Tableau comes in a desktop, server and online hosted model.

- **Tableau Desktop** is used for powerful data visualizations and has an interactive dashboard. Tableau Desktop is supported by Windows and Mac.
- **Tableau Server** allows dashboard sharing and collaboration across teams in the organization. At the moment, Tableau Server is Windows and Linux compatible.
- **Tableau Online** is a hosted Tableau Server version to skip hardware setup. It is always updated, reliable and secure. **Tableau Mobile** can be used here as well to access data on the go through iOS or Android apps.
- **Tableau Public** is a free software that allows anyone to connect to a spreadsheet or file and create interactive data visualizations for the web.
- **Tableau Reader** is free and allows you to open and interact with data visualizations built in Tableau Desktop.
Why Data Visualizations?

- Data visualizations are effective because they shift the balance between perception and cognition.
- Seeing (visual perception) is extremely fast and efficient.
- Thinking (cognition) is much slower and less efficient.
- Data visualizations shift the balance toward greater use of visual perception.
- The Gestalt principles of perception arising from 1920’s psychology describe how humans typically see objects by grouping similar elements, recognizing patterns and simplifying complex images.
- These principles are still used today as accurate descriptions of visual behavior.

<table>
<thead>
<tr>
<th>Similarity</th>
<th>Objects that share similar attributes (e.g., color or shape) are perceived as a group.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enclosure</td>
<td>Objects that appear to have a boundary around them (e.g., formed by a line or area of common color) are perceived as a group.</td>
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<tr>
<td>Closure</td>
<td>Open structures are perceived as closed, complete, and regular whenever there is a way that they can be reasonably interpreted as such.</td>
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<tr>
<td>Continuity</td>
<td>Objects that are aligned together or appear to be a continuation of one another are perceived as a group.</td>
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<tr>
<td>Connection</td>
<td>Objects that are connected (e.g., by a line) are perceived as a group.</td>
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</table>

*Note: Nation of Birth and distinct count of ID by color and size. The data is filtered on Fiscal Year and International or Domestic. The Fiscal Year filter keeps 1718. The International or Domestic filter keeps International. The Nation of Birth filter excludes Canada.*
Questions?