Data Visualization for Oracle Business Analytics

BIWA Summit 2014

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Vlamis Software Solutions

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Vlamis Software Solutions

- Vlamis Software founded in 1992 in Kansas City, Missouri
- Developed more than 200 Oracle BI systems
- Specializes in ORACLE-based:
  - Data Warehousing
  - Business Intelligence
  - Design and integrated BI and DW solutions
  - Training and mentoring
- Expert presenter at major Oracle conferences
- www.vlamis.com (blog, papers, newsletters, services)
- Developer for IRI (former owners of Oracle OLAP)
- Co-author of book "Oracle Essbase & Oracle OLAP"
- Beta tester for OBIEE 11g
- Reseller for Simba and Nokia map data for OBIEE
- HOL Coordinator for BIWA Summit 2013

The case for business intelligence and analytics

- Dashboards and BI interfaces as windows into business performance and position.
- Maps, Movement, and Mashups as keys to the future
- Why maps are so powerful as a visualization tool
- Movement and sliders and understanding change
- Data mashups are increasingly important

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Best Practice Focus

- Best practices are objective guides to what is likely to work best.
- Many times visualizations are seen as being "design" and subject to "taste".
- Visualizations should be guided by:
  - Human cognition
  - Accurate representations of data
  - Preferred message (consciously designed by visualization developer)

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- ## Strengths
  - Highly scalable
  - Comprehensive
  - Common Enterprise Information Model
  - Dimensional Structure
  - Web-based front end
  - Integration with Oracle stack

- ## Weaknesses
  - Complexity
  - Visualizations

- ## Opportunities
  - Data-based decision making important
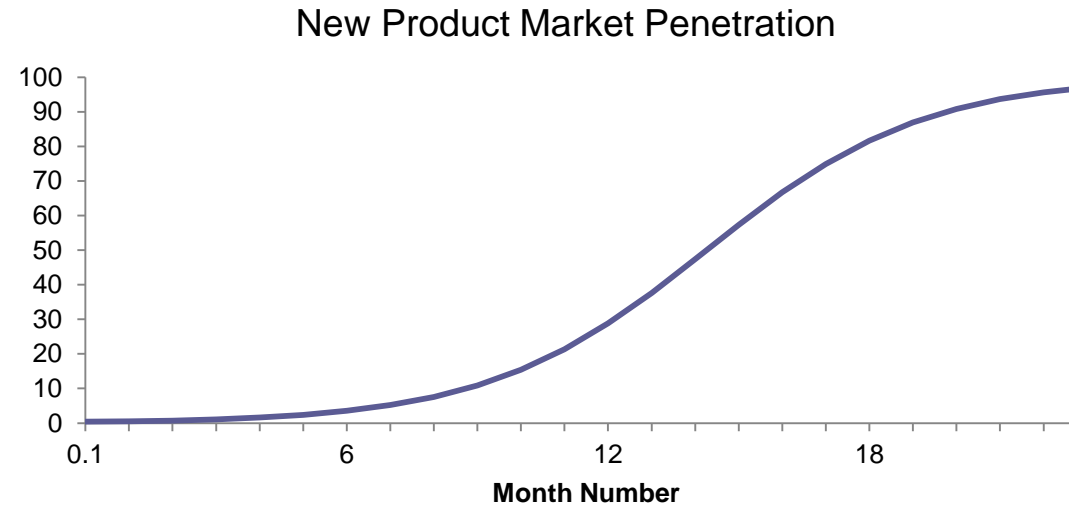 - Fast growing market for BI and Analytics

- ## Threats
  - Ease of use desired
  - Popularity of "no schema" approach to data analysis

Graphs and Tables

- Graphs and Charts depict visual representations and relationships.

New Product Market Penetration

- Tables show data organized for lookup of specific, precise values or items.

District	Month	Dollars	WB Forecast Dollars	% Forecast
ATLANTA DISTRICT	03/01/2008	595,232.0	535,185.0	111.2
BOSTON DISTRICT	03/01/2008	1,882,036.0	1,954,736.7	96.3
CHARLOTTE DISTRICT	03/01/2008	215,360.0	204,592.0	105.3
CHICAGO DISTRICT	03/01/2008	1,381,552.0	1,236,574.0	111.7
CINCINNATI DISTRICT	03/01/2008	827,162.0	742,869.0	111.3
DALLAS DISTRICT	03/01/2008	1,060,316.0	897,654.0	118.1
DENVER DISTRICT	03/01/2008	955,876.0	1,050,735.4	91.0
DETROIT DISTRICT	03/01/2008	961,026.0	1,249,333.8	76.9
JACKSONVILLE DISTRICT	03/01/2008	1,827,434.0	1,892,779.4	96.5

Keys to Effective Tables

- Enable column and row sorting.

- Use appropriate number format.

- Avoid scrolling if possible.

- Lock titles if do use scrolling (BI Publisher)

- Display significant figures.

- Judiciously use conditional formatting for data exploration.

- Avoid putting text in color.

- Eliminate gridlines.

- Left justify text cells.

- Right justify numerical cells (align decimals)

Keys to Effective Graphs

- Do not use 3-D effects.

- Avoid "stop light" color palette.

- Prefer pastel color palettes.

- Avoid bright colors.

- Do not use round gauges or dials.

- Eliminate gridlines, drop shadows, and other graphics.

- Enable interaction for "exploration" graphs

- Prioritize a single message for "explanation" graphs

- Alignment, proximity, contrast.

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Tables

- Table design best practices
- Pivot tables and "cross tabs"
- Differences between tables and pivot tables
- Table Properties box
- Designing effective pivot tables
- Drillable hierarchies
- Conditional formatting
- Layout pane and Drop targets
- Prompts
- Column selectors
- Eliminating columns
- Hiding columns

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Basic Graphs

- Types of graphs when to use them
- Using titles, axis descriptions, and scales effectively
- Color choices in graphs
- Making graphs interactive
- Sliders and graphs in motion
- Editing and formatting graphs
- Zooming and scrolling in graphs

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Maps

- Types of maps
- Map best practices
- Making meaningful maps
- Built-in data sets
- NAVTEQ data sets and POI data
- Sources for additional data sets

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Advanced Visualizations

- Alerts and Delivers
- Trellis Charts
- Gauges and dials
- Visualizations from R
- Incorporating D3 and Java visualizations

General advice

- Dealing with executives who have seen flashy demos and purchased systems because of them
- The need for continual development
- The need for continual training
- The long road
- The perfect is the enemy of the good
- If it's worth doing, it's worth doing right
- Don't settle, the lesson of Steve Jobs and Goldilocks

Thank You!

Thank You for Attending Session

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Presenter Information

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