Introduction to Tableau Desktop

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Databases: A Success Story

- **1960s:** Many approaches
  - Niche applications
  - High costs

- **1970s:** Relational databases emerge as a standard
  - Rows of data organized into normalized tables
  - High-level query language (SQL)
  - Support parallel, transactional queries

- **1980s:** Widespread adoption of OLTP technology
Databases: A Success Story

• **1990s:** Data warehousing enables analytic reporting
  • Dimensional modeling and star schemas
  • Multidimensional cubes & MDX

• **2000s:** Ad hoc queries become mainstream
  • Data warehouse appliances
  • Column stores
  • In-memory databases
Visual Interfaces: Another Success

- **1981**: Xerox Star
Unified

Need to be able to change both the data and the view:

**Traditional Reporting Tools**
Query many times and then generate a summary graph.

**Traditional Visualization Tools**
Query once and then iterate on the presentation of the data.

**Visual Analysis**
Iteratively change both to find the perfect view.
VizQL: Specifies Queries and Views

- Compiles into multiple query languages
- Generates many view types
- Supports an intuitive “drag and drop” interface
Cycle of Visual Analysis

An unpredictable and cyclical process of question-and-answer involving many tasks:

- Discovering structure
- Finding patterns and outliers
- Deriving causal relationships
- etc.
The Cycle of Visual Analysis

Data Modeling

Visual Analysis

Sharing
## Typical Data

![Microsoft Excel - Coffee Chain.xls](attachment:Microsoft%20Excel%20-%20Coffee%20Chain.xls)

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**Dimensions**

- Date
- Market
- State
- Market Size
- Type
- Product Type
- Product

**Measures**

- Sales Profit
- Margin
- COGS
- Total Expense of Market
Tableau Demo
More Information

- Tableau is hiring
  - Seattle, WA
  - San Mateo, CA
- Help menu in application
  - Sample workbooks
  - Links to help topics, community center, and video tours
- Web site [www.tableausoftware.com](http://www.tableausoftware.com)
  - Learning center + training
  - Community center + support
  - Database drivers
- Email
  - jmackinlay@tableausoftware.com