

COURSE 3: DATA VISUALIZATION AND DASHBOARDS WITH EXCEL AND COGNOS

MODULE 1: VISUALIZING DATA USING SPREADSHEETS

1.1 COURSE INTRODUCTION

◆ Why Data Visualization Matters

“It is often said that a picture is worth 1,000 words.”

In **data analytics**, visualizations:

- Make complex data easy to understand
- Highlight trends, patterns, and comparisons
- Help tell a **clear, data-driven story**

This course by **IBM** focuses on building strong visualization skills using:

- **Microsoft Excel**
- **IBM Cognos Analytics**

Course Structure Overview

◆ Module Breakdown

- **Module 1:** Charts, Pivot Charts, basic visualizations in Excel
- **Module 2:** Advanced charts & dashboarding in Excel
- **Module 3:** Cognos Analytics – dashboards & interactivity
- **Final Module:** Hands-on project (Excel + Cognos dashboards)

 Two real-world business scenarios are used throughout the course.

Learning Outcomes

After completing the course, you will be able to:

- Explain the role of visualizations in data storytelling

- Create basic & advanced charts in Excel
 - Build pivot charts and dashboards
 - Create interactive dashboards in Cognos Analytics
 - Analyze business scenarios using visual insights
-

1.2 INTRODUCTION TO CHARTS

Charts help **shape raw data into meaningful information.**

1 Line Charts

◆ Purpose

- Show **trends over time**
- Display continuous data

◆ Best Use Cases

- Sales growth over months/years
- Website traffic over time

📌 X-axis → Time

📌 Y-axis → Numerical values

2 Pie Charts

◆ Purpose

- Show **proportions of a whole**
- Each slice represents a category

◆ Key Rules

- Total always = **100%**
- Best for **single data series**
- Avoid too many categories ($\leq 10\text{--}12$)

📌 Example: Marketing leads by channel

3 Bar Charts

◆ Purpose

- Compare values across categories

◆ Variants

- **Horizontal Bar Chart**
- **Stacked Bar Chart** (sub-categories)

📌 Example: Population comparison across countries
📌 Stacked bars → age groups within population

4 Column Charts

◆ Purpose

- Compare values **side-by-side**
- Show changes over time

◆ Difference from Bar Chart

- Categories → X-axis
- Values → Y-axis
- Better for **positive & negative values**

5 Treemaps

◆ Purpose

- Display **hierarchical data**
- Uses nested rectangles

📌 Rectangle size → magnitude
📌 Color → another metric (e.g., employment rate)

6 Funnel Charts

◆ Purpose

- Show stages in a process
- Highlight drop-offs

📌 Example: Sales pipeline (leads → conversions)

7 Scatter Charts

◆ Purpose

- Show relationships & correlations

📌 Dot size → volume

📌 Color → category

✓ Reveals trends, clusters, patterns

8 Bubble Charts

◆ Purpose

- Variant of scatter chart
- Compares **relative importance** of categories

📌 Example: Budget expenditure comparison

9 Sparklines

◆ Purpose

- Compact trend visualization
- No axes or labels

📌 Example: Stock price movement during the day

1.3 CREATING BASIC CHARTS IN EXCEL

1 Line Charts in Excel

◆ Best For

- Continuous data over time

◆ Steps

1. Filter data (e.g., Ford cars)
2. Select non-adjacent columns (Model + Price)
3. Insert → Line Chart (2-D)
4. Rename chart title
5. Move chart as needed

2 Pie Charts in Excel

◆ Best For

- Proportion comparison

◆ Steps

1. Select Model + Unit Sales
2. Insert → Pie Chart (2-D)
3. Change chart style
4. Show percentage labels
5. Reposition chart

📌 Avoid cluttered pie charts

3 Bar Charts in Excel

◆ Best For

- Comparing values across categories

◆ Steps

1. Select Model + Retention %
 2. Insert → Bar Chart (2-D)
 3. Customize colors or styles
 4. Reposition chart
-

1.4 INTRODUCTION TO PIVOT TABLES (EXCEL)

◆ Why Pivot Tables?

Some questions **cannot be answered easily** using formulas or filters alone.

Pivot Tables allow:

- Fast summarization
- Trend analysis
- Dynamic updates
- Multi-dimensional analysis

 Pivot Tables update automatically when data changes.

◆ Preparing Data for Pivot Tables (Checklist)

- ✓ Format data as a **Table**
- ✓ One header row only
- ✓ No blank rows or columns
- ✓ Numeric fields as **numbers**
- ✓ Date fields as **dates**

◆ Creating a Pivot Table

Steps:

1. Select any cell in the table
2. Insert → PivotTable

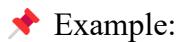
3. Choose New Worksheet
4. Use PivotTable Fields pane

Pivot Areas:

- **Rows** → Categories
- **Columns** → Comparisons
- **Values** → Calculations
- **Filters** → Overall filtering

◆ Calculated Fields in Pivot Tables

Used to create custom metrics.



Total Model Sales = Price × Unit Sales

✓ Added from **PivotTable Analyze → Fields, Items & Sets**

1.5 USING THE PIVOTCHART FEATURE

◆ What is a Pivot Chart?

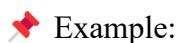
A graphical representation of a Pivot Table.

- ✓ Ideal for complex datasets
- ✓ Automatically syncs with Pivot Table

1 Area Charts (Pivot Chart)

◆ Purpose

- Show trends with filled area
- Handles positive & negative values



- Average price vs resale value across car models

- ✓ Filters can be applied directly on chart or table

2 Column Charts (Pivot Chart)

- ◆ Purpose

- Compare values using vertical bars

- ❖ Example:

- Comparing BMW, Cadillac & Hyundai prices
-

1.6 DRILL-DOWN & DRILL-UP

- ✓ Expand / collapse data using:

- Plus/minus buttons
- Pivot table rows

- ❖ Chart buttons expand **all fields**

- ❖ Individual expansion done in Pivot Table

HANDS-ON LAB 1: CREATING BASIC CHARTS

MODULE 2: CREATING VISUALIZATIONS AND DASHBOARDS WITH SPREADSHEETS

2.1 TREEMAPS

◆ What is a Treemap?

A **Treemap** is a chart used to:

- Compare values across **hierarchical categories**
- Display **proportions** using **rectangles**
- Use **color and size** to represent data magnitude

◆ When to Use

- Large datasets
- Hierarchical data (Category → Subcategory)
- When space-efficient visualization is needed

◆ How to Create a Treemap

1. Select **non-adjacent columns** (e.g., *Model* and *Unit Sales*)
2. Go to **Insert** → **Charts** → **Hierarchy** → **Treemap**
3. Edit:
 - **Chart Title** (e.g., *Unit Sales of Ford Cars*)
 - **Chart Style** (choose from style gallery)

◆ Key Insights from Treemap

- Largest rectangle → highest value
- Helps quickly identify:
 - Top-performing category
 - Lowest contributors

📌 Example Insight

F-Series has the highest unit sales, while Contour has the lowest.

2.2 SCATTER CHARTS (XY CHARTS)

◆ What is a Scatter Chart?

A **Scatter Chart** shows the relationship between **two numerical variables** by plotting data points on X and Y axes.

◆ Key Characteristics

- Each point represents one observation
- Used to identify:
 - Correlation
 - Trends
 - Clusters
- Also called **XY Charts**

◆ Common Use Cases

- Statistical analysis
- Scientific & engineering data
- Price vs value comparisons

◆ How to Create a Scatter Chart

1. Select **two adjacent numeric columns**
 - Example: *Price* and *Year Resale Value*
2. Go to **Insert → Charts → XY (Scatter)**
3. Customize:
 - Chart title
 - Chart style
 - Axis titles
 - X-axis: *Retail Price*
 - Y-axis: *Year Resale Value*

◆ Interpretation

- As retail price increases → resale value gap increases

- Lower-priced cars retain value better after 1 year

★ Exam Tip:

Scatter charts are best for **relationship analysis**, not comparison.

2.3 HISTOGRAMS

◆ **What is a Histogram?**

A **Histogram** shows the **distribution** of numerical data grouped into **bins (ranges)**.

◆ **Histogram vs Bar Chart**

Histogram	Bar Chart
Shows distribution	Compares values
Continuous data	Categorical data
Uses bins	Uses categories

◆ **How to Create a Histogram**

1. Select numeric data (e.g., *Price*)
2. Go to **Insert → Charts → Statistical → Histogram**
3. Customize:
 - Chart title
 - Chart style

◆ **Bins in Histogram**

- Excel automatically creates bins
- Example price ranges:
 - ₹9,235 – ₹18,635
 - ₹18,635 – ₹28,035
- Each bar = frequency count

◆ **Customizing Bins**

Open **Format Axis → Axis Options**:

- Change **Bin Width**
- Set **Number of Bins**
- Revert to **Automatic**

📌 Key Insight

- Most car models fall in the ₹18,635 – ₹28,035 range
 - Very few models exist in highest price ranges
-

2.4 FILLED MAP CHARTS

◆ What is a Filled Map Chart?

A **Filled Map Chart** visualizes values across **geographical regions** using color intensity.

◆ Suitable Data

- Country
- State
- Region
- Postal codes

◆ How to Create

1. Copy geographic data (e.g., *Country + Unit Sales*)
2. Select data
3. Go to **Insert → Charts → Map → Filled Map**
4. Customize title and style

◆ Interpretation

- Darker color → higher values
- Lighter color → lower values

📌 Example Insight

- Highest sales: United States
- Lowest sales: India, Japan, Australia

2.5 SPARKLINES

◆ What are Sparklines?

Sparklines are **mini charts inside a cell** used to show trends over time.

◆ Types of Sparklines

- Line
- Column
- Win/Loss

◆ Use Cases

- Sales trends
- Seasonal patterns
- Performance tracking
- Max–Min highlighting

◆ How to Create Sparklines

1. Select adjacent data (e.g., Q1–Q4 sales)
2. Go to **Insert → Sparklines → Line**
3. Choose location cell
4. Copy sparkline down the column

◆ Customization Options

- Show **Max / Min values**
- Change style
- Adjust line thickness
- Resize rows/columns

📌 Insights from Sparklines

- Q3 is best sales quarter for most models
- Exceptions:
 - Mustang → Q4

- Focus → Q2
-

2.6 OTHER ADVANCED EXCEL CHARTS (OVERVIEW)

Chart Type	Purpose
Waterfall	Cumulative positive & negative values
Funnel	Stages in a decreasing process
Stock	Open, High, Low, Close, Volume
Surface	3D trends across two numeric dimensions
Radar	Compare values relative to a center

HANDS-ON LAB 2: CREATING ADVANCED CHARTS

2.7 INTRODUCTION TO DASHBOARDS

◆ What is a Dashboard?

A **dashboard** is a **single-screen visual interface** that displays the most important data, metrics, and **Key Performance Indicators (KPIs)** in a clear and easy-to-understand format.

📌 The concept of dashboards originates from the **automotive industry**, where a car dashboard shows:

- Speed
- Fuel level
- RPM
- Engine temperature

Similarly, data dashboards show **key business information at a glance**.

◆ Purpose of a Dashboard

Dashboards are designed to:

- Present **critical data in one place**
- Use **visual elements** (charts, graphs, maps)
- Enable **quick understanding and decision-making**
- Allow **user interaction**

◆ Key Components of a Dashboard

Dashboards typically consist of:

-  Charts & Graphs
-  Pivot Tables
-  Map Charts
-  Sparklines
-  Filters, **Slicers**, and **Timelines**

These components may be built from:

- A **single data source**
- Or **multiple data sources**

◆ Interactive Dashboards

Modern dashboards are **interactive**, allowing users to:

- Filter data dynamically
- Change views using slicers
- Perform **self-service Business Intelligence (BI)**

 Users can control *what data they see* without needing technical help.

◆ Benefits of Dashboards

Dashboards:

- Provide insights into **key business data**

- Highlight **patterns and trends**
- Offer **interactive filtering**
- Update **automatically** when data changes
- Present a **centralized view** of information

◆ Business Use Cases

Dashboards are widely used in:

- Financial forecasting & reporting
- Project management
- Executive reporting
- Human Resources
- Customer service & helpdesk analytics
- Healthcare monitoring
- Call center analytics
- Social media & marketing analysis

◆ Dashboards as a Data Analyst Skill

For a data analyst, dashboarding is a **must-have skill**.

If you can build **clean, interactive, and visually appealing dashboards** using tools such as:

- Microsoft Excel
- Google Sheets
- Tableau
- IBM Cognos Analytics
- Dash
- Shiny

...it greatly improves your **employability as a data analyst**.

2.8 CREATING A SIMPLE DASHBOARD USING EXCEL

◆ Prerequisites Before Creating a Dashboard

Before building a dashboard, ensure:

1. Data is **collected and organized**
2. Data is **clean and error-free**
3. No **blank rows or columns**
4. Data is formatted as a **table**
5. **Pivot tables** are created for analysis
6. Key **charts and visualizations** are ready

◆ Dashboard Creation Process

1. Create a **new worksheet**
2. Rename it as *Dashboard*
3. Move it to the **end of worksheet tabs**
4. Copy existing visualizations into the dashboard:
 - Pie Chart
 - Column Chart
 - Area Chart
 - Treemap
 - Scatter Plot
 - Histogram
 - Map Chart
 - Sparklines
 - Line & Bar Charts

◆ Dashboard Design Principle: *Less is More*

Displaying too many visuals can:

- Overwhelm users
- Hide key insights

📌 Best Practice:

Focus on **1–2 key messages**, not everything. ◆ **Creating a Cleaner Dashboard**

1. Duplicate the dashboard worksheet
2. Remove **redundant or less useful charts**
 - Remove treemap if pie chart shows same insight
 - Remove duplicate chart types
3. Keep only **essential visuals**
4. Add **Slicers** for interactivity

◆ **Styling & Formatting**

To make the dashboard professional:

- Use a **consistent color theme**
- Apply same chart style across visuals
- Match slicer colors with charts
- Align and resize visuals neatly

◆ **Removing Screen Clutter**

For presentation:

- Remove gridlines
- Hide formula bar
- Remove headings
- Collapse the ribbon

This creates a **clean, presentation-ready dashboard**.

- ◆ **Dashboard Interactivity**

- Slicers filter **multiple charts simultaneously**
- Pivot chart filters update:
 - Original data
 - All linked visuals
- Changes in source data automatically update:
 - Charts
 - Maps
 - Dashboard visuals

📌 **Example:**

Updating car sales in Australia instantly updates:

- Map chart color
- Dashboard map visualization

HANDS-ON LAB 3: CREATING A SIMPLE DASHBOARD WITH EXCEL

MODULE 3: CREATING VISUALIZATIONS AND DASHBOARDS WITH COGNOS ANALYTICS

3.1 COGNOS ANALYTICS: INTRODUCTION

◆ What is Cognos Analytics?

IBM Cognos Analytics is a **business intelligence (BI) and analytics platform** developed by **IBM**.

It is used to **analyze data, create visualizations, dashboards, and reports**, and gain insights using AI-powered tools.

◆ Key Features of Cognos Analytics

Cognos Analytics provides:

-  **Data modeling capabilities**
-  **Data exploration**
-  **Advanced filtering options**
-  **AI-powered assistant** (natural language queries)
-  **Interactive dashboards**
-  **Custom reports tailored to users**

Course Focus:

Using Cognos Analytics to **design professional, interactive dashboards**.

3.2 SIGNING UP FOR IBM COGNOS ANALYTICS (FREE TRIAL)

◆ Trial Overview

- **30-day free cloud trial**
- No prior IBM account required

◆ Sign-Up Steps

1. Open a web browser
2. Go to: ibm.com/products/cognos-analytics

3. Click **Start free for 30 days**
4. Create an **IBM ID** by entering:
 - Email address
 - First & last name
 - Password
5. Provide additional details:
 - Country & state/province
 - Phone number
 - Student status
 - Industry sector
 - Nearest data center
6. Click **Next**
7. Check email for **7-digit verification code**
8. Enter code and click **Start today**

◆ **Launching Cognos Analytics**

- After verification, you are redirected to the **Products Dashboard**
- Select **IBM Cognos Analytics on Cloud Trial**
- Launch the platform

 You are now ready to build dashboards and visualizations.

3.3 NAVIGATING IN COGNOS ANALYTICS

◆ **Cognos Analytics Homepage**

After launching, the **homepage opens** with two main navigation areas:

1. Main Menu (Top-Left)

Used for:

- Creating new content
- Uploading data

- Accessing existing items

2. Toolbar (Top-Right)

Includes:

-  Trial days remaining
 -  AI Assistant
 - Upgrade options
- ◆ **Homepage Features**
- Video tutorials & guided tours
 - Natural language query box (AI assistant)
 - Upload or create content
 - Recently used items

3.4 UPLOADING DATA IN COGNOS ANALYTICS

◆ **Supported Dataset**

- CSV (Comma Separated Values) file

◆ **Uploading a CSV File**

1. Open Main Menu
2. Click **Upload data**
3. Select CSV file from system
4. Click **Open**
5. System analyzes data (status bar visible)
6. Upload completes automatically

◆ **Data Storage Locations**

- **My Content** → Personal datasets
- **Team Content** → Shared datasets
- **Samples** → Practice datasets

- **IBM Accelerator Catalog** → Extra resources & visuals
-

3.5 STARTING A DASHBOARD IN COGNOS ANALYTICS

◆ Steps to Create a Dashboard

1. Select your dataset
2. Choose **Create Dashboard**
3. Select a **dashboard template**
 - Based on number & type of visualizations
4. Click **Create**

◆ Dashboard Interface Overview

◆ Left Panel: Selected Source

- Displays dataset fields (columns)
- Used to build visualizations

◆ Dashboard Navigation Icons

1 Sources

- View and use fields from selected dataset

2 Pins

- Stores **saved (pinned) visualizations**
- Helps reuse common visuals across dashboards

3 Visualizations

- **System tab** → Built-in charts
- **Custom tab** → Upload custom visuals

Widgets

Widgets can include:

- Text
 - Images
 - Shapes
 - Video / audio
 - Embedded web pages
-

3.6 PINNING VISUALIZATIONS

◆ Why Pin Visualizations?

- Quick access to frequently used charts
- Reuse across dashboards

◆ How to Pin a Visualization

1. Add visualization to canvas
 2. Select the visualization
 3. Click **Pin icon**
 4. Confirmation message appears
 5. Visualization appears in **Pins list**
-

HANDS-ON LAB: GETTING STARTED WITH COGNOS ANALYTICS

3.7 CREATING A SIMPLE DASHBOARD IN COGNOS ANALYTICS

Learning Objectives

After completing this lesson, you should be able to:

- Create a **simple dashboard** in Cognos Analytics

- Use **multiple methods** to create visualizations
- Configure **interactive filters** within a dashboard

1 Starting a Dashboard in Cognos Analytics

◆ Platform Used

IBM Cognos Analytics

◆ Steps to Create a Dashboard

1. Go to **My Content**
2. Select the uploaded dataset
3. From the **toolbar**, click **Create → Dashboard**
4. Choose a **dashboard template**
 - Example used: **4 small panels on top + 1 large panel at bottom**
5. Click **Create**

👉 The dashboard canvas opens and is ready for visualization.

2 Understanding Data Usage Properties

When data is uploaded, Cognos automatically assigns **usage properties**:

- **Measure** → Numeric values used for calculations (e.g., Sales)
- **Identifier** → Unique identifiers (e.g., Order Number)

◆ Example

- **Order Number**
 - Default: Measure
 - Changed to: **Identifier**

👉 Usage properties can be manually changed if needed.

3 Creating Visualizations (Method 1: Automatic)

◆ Drag-and-Drop Method

1. Select a data field from the **Data Source pane**
2. Drag it onto a dashboard panel
3. Drop it when the **blue double-arrow indicator** appears

◆ KPI Visualizations Created

- **Total Sales** → Drag *Sales* → auto visualization
- **Number of Orders**
 - Drag *Order ID*
 - Cognos selects **Table** (best for identifiers)
 - Manually changed to **Summary**
- **Quantity Ordered**
- **Average Sale**
 - Drag *Sales*
 - Change aggregation from **Sum** → **Average**

📌 These form **Key Performance Indicators (KPIs)**.

4 Creating Visualizations (Method 2: Manual Selection)

◆ Steps

1. Select a visualization type (e.g., Map)
2. Drag it onto the canvas
3. Assign data fields manually

◆ Example: Sales by Country (Map Visualization)

- Drag **Country** → Regions (Location)
- Drag **Sales** → Location Color
- Result: **Color-coded map showing sales intensity**

◆ Resizing Visualizations

- Drag corners to resize
- Canvas shows **percentage usage** of dashboard space
- Example: Map resized to **~50% width**

◆ Visualization Properties

Each visualization supports customization:

- Legend settings
- Chart options
- Layer controls (regions, points, latitude/longitude)

5 Creating Visualizations (Method 3: AI Assistant)

◆ Using the Assistant

- Assistant panel shows active dataset
- Options:
 - Type a question manually
 - Click **Suggested Questions**

◆ Example Question

“Which deal size has the most sales?”

◆ Result

- Assistant generates:
 - Visualization
 - Alternative chart types (bar, scatter, bubble)

👉 Chosen visualization is **dragged onto the canvas**

6 Dashboard Interactivity

Dashboards in Cognos Analytics are **interactive by design**.

◆ **Click-Based Interactions**

- Clicking a data point (e.g., **Medium Deal Size bubble**):
 - Automatically filters **all other visualizations**
- Selecting another value (e.g., **Large Deal Size**) updates all visuals

📌 This enables **cross-filtering**.

7 Using Filters in Dashboards

◆ **Adding a Filter**

1. Select a field (e.g., **Order Status**)
2. Drag it to:
 - **All Tabs** → affects entire dashboard
 - **This Tab** → affects only current tab

◆ **Example Filter**

- Filter applied: **Order Status = On Hold**
- Result:
 - All visualizations update
 - Only a few countries show on-hold orders

📌 Filters can be **single-select or multi-select**.

HANDS-ON LAB: DIFFERENT METHODS FOR CREATING DASHBOARD VISUALIZATIONS WITH COGNOS ANALYTICS

3.8 ADVANCED CAPABILITIES IN COGNOS ANALYTICS DASHBOARDS

Learning Objectives

After completing this lesson, you will be able to:

- Create **calculations** in Cognos dashboards
- Use **navigation paths** to drill deeper into data
- **Exclude data points** from visualizations
- Apply **Top / Bottom filters**
- Create **instant infographics**

1 Dashboard Setup for Advanced Features

◆ Platform Used

IBM Cognos Analytics

◆ Initial Setup Steps

1. Select a dataset
2. Create a dashboard
3. Choose a **2 × 2 dashboard template**
4. Change **Order Number** usage:
 - From **Measure**
 - To **Identifier**

 Correct usage properties are essential for accurate analysis.

2 Creating Calculations in Cognos Dashboards

◆ What Are Calculations?

- Custom computed fields (similar to Excel formulas)
- Treated like normal fields once created

◆ Steps to Create a Calculation

1. In **Data Source pane**, right-click dataset
2. Select **Create Calculation**
3. Enter a name (e.g., **Margin**)

◆ Calculation Components

- **Data items** (fields)
- **Operators** (+, -, ×, ÷)
- **Functions**
 - Operators
 - Summaries
 - Constants
 - Type conversions
- Optional **filters**

◆ Example: Margin Calculation

Formula:

Margin = MSRP – Sale Price

✓ Attributes can be:

- Dragged from the left pane
- Typed directly (auto-suggest helps)

❖ Once created, **Margin** appears as a regular field.

◆ Insight from Calculation

- Margin by **Product Line** shows:
 - Trains have a **negative margin**

3 Navigation Paths (Drill-Down Analysis)

◆ **What Are Navigation Paths?**

- Allow users to **drill up and down** through related fields
- Enable detailed data exploration

◆ **Creating a Navigation Path**

1. Select starting field (e.g., **Product Line**)
2. Add next levels:
 - Customer
 - Order

 Navigation path appears in the **Data Source pane**.

◆ **Drill-Down Example**

- Drill into **Trains**
- Identify customers with negative margins
- Drill further to **individual orders**
- Example insight:
 - *Mini Gifts Company* has multiple loss-making orders

4 Excluding Data Points from Visualizations

◆ **Why Exclude Data?**

- Remove dominant or irrelevant values
- Improve visibility of other insights

◆ **Example**

- Visualization: **Sales Status vs Product Line**
- Issue: **Shipped** status dominates chart

◆ **Solution**

- Exclude **Shipped** status

- Visualization now highlights:

- On Hold
- Cancelled
- Other statuses

❖ Exclusions affect **only that visualization**.

5 Top & Bottom Filters

◆ Purpose

- Focus on **most important data points**
- Useful for **large datasets**

◆ How to Apply Top / Bottom Filter

1. Right-click on a measure (e.g., **Sales**)
2. Select **Top or Bottom**
3. Choose:
 - Top or Bottom values
 - Number (default = 10)

◆ Example

- **Top 10 Customers by Sales**
- Instantly highlights highest-value customers

❖ Helps in **prioritization and performance analysis**.

6 Creating Instant Infographics

◆ What Are Infographics?

- Visual enhancements using shapes/icons
- Make dashboards more engaging and memorable

- ◆ **Steps to Create an Infographic**

1. Open **Widgets** menu
2. Select a shape (e.g., **Piggy Bank**)
3. Drag and drop onto a visualization

 Turns numeric data into **visual storytelling elements**.

HANDS-ON LAB: ADVANCED DASHBOARD CAPABILITIES IN COGNOS ANALYTICS

FINAL ASSIGNMENT

[Final Project Overview](#)

[Final Assignment - Part 1: Creating Visualizations Using Excel](#)