**POWER BI VISUALS**

**DIFFERENT VISUALIZATIONS (REPORT SHAPES) IN POWER BI?**

|  |  |  |
| --- | --- | --- |
| 1. STACKED BAR CHARTS | 11. LINE, CLUSTERED COLUMN CHART | 21. GAUGE |
| 2. STACKED COLUMN CHARTS | 12. RIBBON CHART | 22. CARD |
| 3. CLUSTERED BAR | 13.WATERFALL CHART | 23. MULTICARD |
| 4. CLUSTERED COLUMN | 14. SCATTER CHART | 24. KPI |
| 5. 100% STACKED BAR | 15. PIE CHART | 25. SLICER |
| 6. 100% STACKED COLUMN | 16. DOUGHNUT CHART | 26. **TABLE** |
| 7. LINE CHART | 17. **TREEMAP** | 27. MATRIX |
| 8. AREA CHART | 18. MAP | 28. R SCRIPT VISUAL |
| 9. STACKED AREA | 19. FILLED MAP | 29. PYTHON VISUAL |
| 10. LINE, STACKED COLUMN CHART | 20. FUNNEL | 30. ArcGIS Maps |
| 31. INFOGRAPHICS | 32. AZURE MACHINE LEARNING (ML) | ++ Customized Visuals |

**COMMON PROPERTIES IN VISUALIZATIONS?**

|  |  |  |
| --- | --- | --- |
| General | Data Labels | Background |
| Title | Visual Header | Tooltip |
| Border | Plot Area | Axis |
| Legend | Positions | Lock Aspect |

|  |  |  |
| --- | --- | --- |
| **TABLE VISUAL** | **FIELDS** | VALUES |
| **FILTERS** |  |
| **FORMAT** | **General** (Size, Position);  **Table Style** (Default, None, Minimal, Bold Header, Alternate Rows, Contrast Alternating Rows, Flashy Rows); **Grid** (Vertical Grid, Horizontal Grid, Grid Color, thickness, Row Padding, Text Size); Column Header (Font, Background, Auto Size, Text Size, Alignment, Word Wrap); Values (Font, Background, Alternate font color, Alternate background color, Outline, URL, WordWrap, Font, Text Size); Total (Totals, Font, Background, Outline, Font family, TextSize); Field Formatting (Font, Background, Alignment, Apply to Header, Apply to Values, Apply to Totals); Conditional Formatting (Background, Font Color, Data Bar; Icon); Title (Text, Font Color, Background Color, Alignment, TextSize, FontFamily); Background (Color, Transparency);Lock Aspect; Border (Color); |
|  | | |
| **MATRIX VISUAL** | **FIELDS** | VALUES |
| **FILTERS** |  |
| **FORMAT** | General (Size, Position);  Grid (Vert Grid, Horz Grid, Horz Grid Color, thickness, Row Padding); Matrix Style (Default, None, Minimal, Bold Header, Alernate Rows, Constrast Alternating Rows, Flashy Rows); Column Headers (Font, Background, Auto Size,Text Size, Alignment, Word Wrap); Row Headers (Font, Background, Auto Size,Text Size, Alignment, Word Wrap); **Grid** (Vertical Grid, Horizontal Grid, Grid Color, thickness, Row Padding, Text Size); Column Header (Font, Background, Auto Size, Text Size, Alignment, Word Wrap); Values (Font, Background, Alternate font color, Alternate background color, Outline, URL, WordWrap, Font, Text Size); Total (Totals, Font, Background, Outline, Font family, TextSize); Field Formatting (Font, Background, Alignment, Apply to Header, Apply to Values, Apply to Totals); Values (Font, Background, Alternate font color, Alternate background color, Outline, URL, WordWrap, Font, Text Size, BANDED ROW STYLE); Total (Totals, Font, Background, Outline, Font family, TextSize); Field Formatting (Font, Background, Alignment, Apply to Header, Apply to Values, Apply to Totals); Conditional Formatting (Background, Font Color, Data Bar); Title (Text, Font Color, Background Color, Alignment, TextSize, FontFamily); Background (Color, Transparency);Lock Aspect; Border (Color); |
|  | | |
| **SLICER VISUAL** | **FIELDS** | VALUES |
| **FILTERS** |  |
| FORMAT | General(OutlineColor, OutlineWeight, Orientation, X Position, Y Position, Width, Height, Alt); Selection Controls (Select All on, Single Select on); Header (Background, Font color, Color, Text size, Font Family, Outline [frame]); Filter Restatement (to auto display the selected value in the Slicer Header); Items (Font Color, Background, Outline, Text Size, Font Family); Background (Color, Transparency); Lock Aspect; Border (Color); Title (Text, Font Color, Background Color, Text,Alignment, FontFamily); |

**IMPORTANT TERMS FOR CHART VISUALS :**

**AXIS** USED TO CATEGORIZE THE VALUES IN CHART RERORTS EX: COUNTRY

**VALUE** USED TO REPORT VALUES FOR EACH CATEGORY IN CHART REPOR (EX: SALES)

**COLOR SATURATION** USED TO REPORT THE AXIS OR CATEGORY DATA BASED ON THE VALUE OR AMOUNT OF THIS FIELD

**LEGEND** USED TO DIVIDE EACH CATEGORY (AXIS ITEM) INTO MULTIPLE UNITS.

EACH UNIT WITH A SPECIFIC COLOR

LEGEND IS ALTERNATIVE REPRESENTATION FOR COLOR SATURATION

**TOOLTIP** ADDITIONAL VALUES WHEN WE PERFORM MOUSE HOVER ON ANY DATA POINT.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Stacked Bar Chart  Stacked Column Chart  Clustered Bar Chart  Clustered Column Chart  100% Stacked Bar Chart  100% Stacked Column Chart | | **FIELDS** | | VALUES |
| **FILTERS** | |  |
| **FORMAT** | | General (Responsiveness, X & Y Positions, Width, Height, Alt Text); Legend (Position, Title, Legend Name, Color, Font, Text Size); Y Axis(Position, Color, Text Size, Font family, Minimum Category Width, Maximum Size, Inner Padding, Title); X Axis (Scale Type, Start, End, Color, Text Size, Font, Display Units, Value Decimal Places, Title, Gridlines, Color, Stroke Width, Line Style); Data Labels(Color, Display Units, Value Decimal Places, Position, Over Flow Text, Text Size, Font Family, Show Background); Data Colors (Diverging : Minimum, Center, Maximum); Plot Area (Transparency + fit / fill / normal); Background(Color, Transparency); Lock Aspect; Border (Color); Title (Font, Background, Alignment, Text, Font; |
|  | | | | |
| LINE CHART  AREA CHART | | **FIELDS** | | VALUES |
| **FILTERS** | |  |
| **FORMAT** | | General (Responsiveness, X Position, Y Position, Width, Height, Alt Text); High Density Factor (On : More Color Resolution For Printing @ Lines ); Legend (Position, Title, Color, Font Family, Size, Style [Markers, Lines]; Match Line Color, Circle Default Icon); X Axis(Type [Continuous, Categorical], Color, Font Family, Size, Minimum Category, Width, Maximum Percent Size Allowed In The Axis, Concatenation, Title); Y Axis(Position, Scale Type, Start & End, Color, Text Size, Font Family, Display Units, Decimal Values, Title; Grid Line [Color, Strike, Line Style); Data Colors [Color For Each Legend Value]; Data Labels [Color, Display Units, Value Decimal, Text Size, Font Family, Show Background] Shapes [Stroke Width, Join Type [Round, Miter, Bevel], Line Style [Sold, Dotted, Dashed], Markers [Show, Shape, Marker Size, Marker Color, Customize Series]; Plot Area; Background; Border; Lock Aspect; |
| Ribbon Chart | | Axis, Legend, Value  ToolTips, Filters | | General (Responsiveness, X & Y Positions, Width, Height, Alt Text); Legend (Position, Title, Legend Name, Color, Font, Text Size); Y Axis(Position, Color, Text Size, Font family, Minimum  Category Width, Maximum Size, Inner Padding, Title); X Axis (Scale Type, Start, End, Color, Text Size, Font, Display Units, Value Decimal Places, Title, Gridlines, Color, Stroke Width, Line  Style); Data Colors; Data Labels(Color, Display Units, Value Decimal Places, Position, Over Flow Text, Text Size, Font Family, Show Background); Plot Area (Transparency); Title; Lock Aspect;  Ribbons (Spacing, Match Series Colors, Transparency, Border); | | |
| Waterfall Chart | | Category, Break  Down, Y Axis,  ToolTips, , Filters | | All Above + Sentiment Colors(Increase, Decrease, Other, Total); Breakdown(Max breakdowns) | | |
| Scatter Chart | | Details, Legend  X Axis, Y Axis, Play Axis, Size Color Saturation ToolTips, Filters | | All Above ++ Shapes (Size, Marker Shape, Customized Series); Category Labels; Fill Point | | |
| Line, Stacked Column Chart  Line, Clustered Column Chart | | Shared Axis, Column Series  Column Values  Line Values  ToolTips, Filters | | General (Responsiveness, X & Y Positions, Width, Height, Alt Text); Legend (Position, Title, Legend Name, Color, Font, Style, Match Line Color, Circle default Icon, ); Y Axis(Position, Color,  Text Size, Font family, Display Units, Value Decimal Places, Gridlines, Color, Stroke Width, Line Style, Show Secondary, Inner Padding, Title); Data Colors; Data Labels(Color, Display Units,  Value Decimal Places, Orientation, Position, Text Size, Font family, Show Background, Background Color, Transparency); Shapes (Shade Area, Stroke Width, Join Type, Line Style, Show Marker); Plot Area; Title; Background; Lock Aspect; Border; | | |
| Pie Chart  Doughnut Chart | | Legend, Details,  Values, ToolTips  Filters | | Legend (Position, Title, Legend Name, Color, Font, Text Size); Data Colors; Details Labels (Label Style, Color, Display Units, Value Decimal Places, Text Size, Font Family); Title (Text, Font,  Background); Background(Color, Transparency); Lock Aspect; Border; | | |
| Tree Map | | Group, Details Values, Filter, Color Saturation, ToolTip | | All Above + Category Labels (Size, Font) | | |
| Funnel | | Group, Values,  Color Saturation,  Tool Tips, Filters | | Category Labels (Size, Font); Data Colors (Default Color, Show All); Data Labels (Color, Display Units, Value Decimal Places, Position, Text Size, Font); Conversion Label Rate(Color,  Text Size, Font); Title; Background; Lock Aspect; Border; | | |
| Gauge | | Value, Max Value,  Min Value, Target  Value, ToolTip,  Filters | | Gauge Axis (Min, Max, Target); Data Colors (Fill, Target); Data Labels(Color, Display Units, Value Decimal Places, Text Size, Font Family); Target(Color, Display Units, Value Decimal Places,  Text Size, Font Family); Callout Value(Color, Display Units, Value Decimal Places); Title; Background; Lock Aspect; Border; | | |
| Card  Multi-row Card | | Fields, Filters | | Data Labels (Color, Display Units, Value Decimal Places, Text Size, Font);Category Labels (Color, Size, Font); Word Wrap; Title; Background; Lock Aspect; Border; General(Position, Alt Text) | | |
| KPIs | | Indicator, Trend  Axis, Target Goals,  Filters | | Indicator (Display Units, Value Decimal Places);Trend Axis; Goals; Distance; Color Coding (High to Low or Low to High Distance, Good Color, Neutral Color, Bad Color); Title; Background; Border; Lock Aspect; General(Position, Alt Text) | | |
| Map  Filled Map | | Location, Legend,  Longitude, Latitude,  Size, Color Saturation  ToolTips, Filters | | Legend(Position, Title, Legend Name, Color, Font Family); Data Colors; Category Labels (Color, Size, Font, Show Background, Background Color, Transparency); Bubbles(Size); Map Controls  (Auto Zoom); Map Styles (Theme: Road, Arial, Dark, Light, Gray Scale); Title; Background; Border; Lock Aspect; General(Position, Alt Text); | | |
| R visual | |  | | Used to perform R Scripting, Forecasts, Machine Learning | | |
| Python Visual | |  | | Used to perform Python Scripting, Forecasts, Machine Learning | | |