

Radar Charts

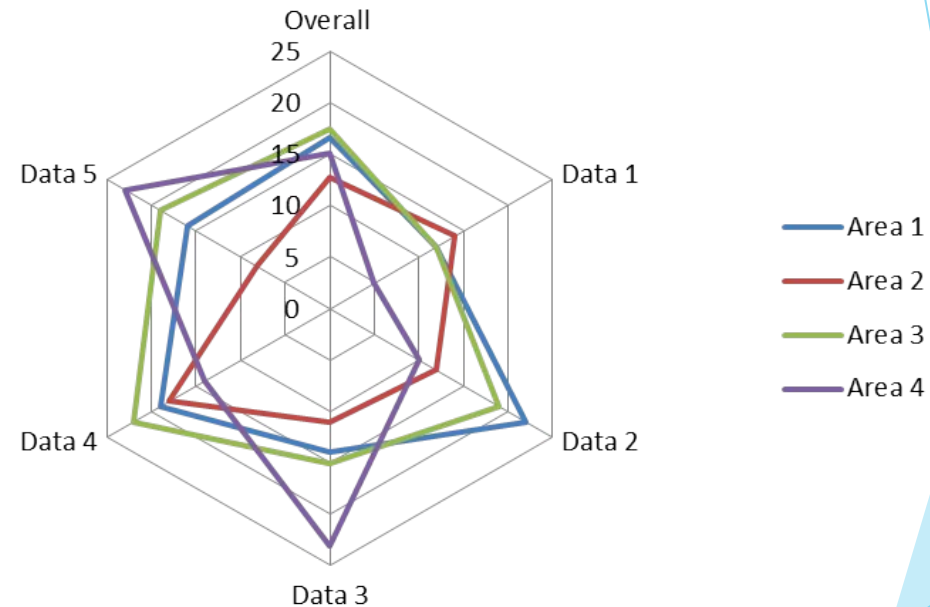
How and why are they used?

Agenda

- ▶ Introduction to Radar Charts
- ▶ Examples: The Ugly, the Bad, and the Good
- ▶ Creation: Using Excel to build your Chart
- ▶ Demo: Building a Radar Chart into a PowerPoint
- ▶ Questions?

What is a radar chart?

- ▶ A radar chart is a graphical representation of the comparison of the true values of a set of criteria versus the desired values.
- ▶ This tool is useful to identify outliers and to visualize variations in a set of data.
- ▶ Alternative names given to radar charts include star plots, web/spider web/cobweb charts, and kiviati diagrams.

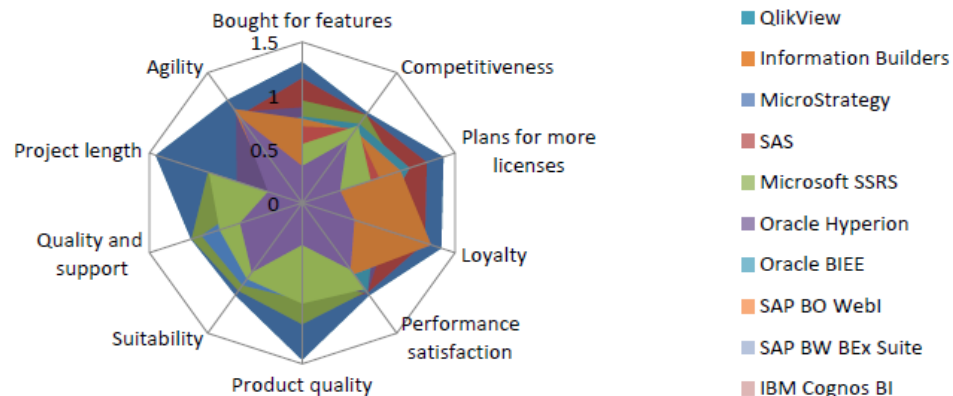


Examples

The background features a complex, abstract design of overlapping, semi-transparent blue triangles and polygons. The colors range from light sky blue to deep navy blue. The shapes are layered, creating a sense of depth and movement. The overall composition is modern and clean, typical of a corporate or academic presentation slide.

The Ugly

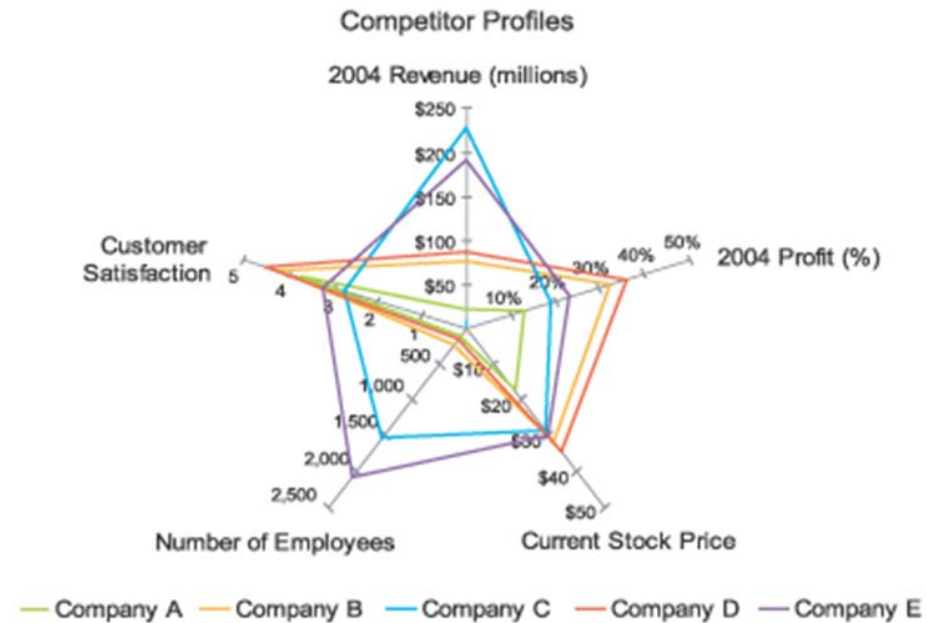
BI Giants: QlikView Comes in First



- ▶ Solid fill makes it impossible to analyze the data for all options
- ▶ Too colorful with similar shades makes it difficult to determine which products are being shown at times
- ▶ The label values have no context and are confusing
- ▶ It is unlikely that all 10 of those criteria should be weighted equally, but they are represented as such

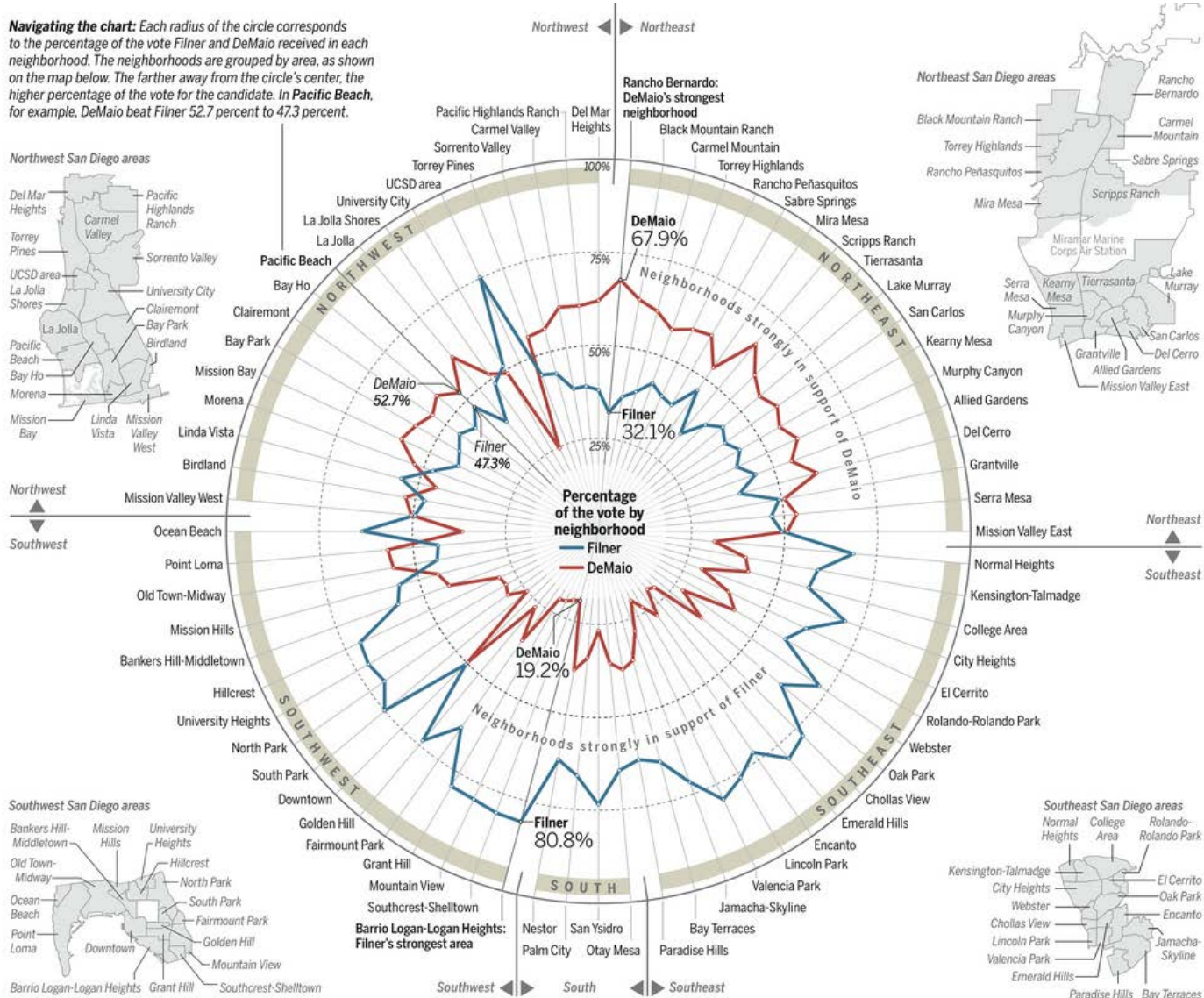
The Bad

- ▶ Vastly different criteria on each axis
- ▶ Difficult to make any connection as to which competitor is stronger across all criteria
- ▶ Information would be better represented in a different type of chart



The Good

Navigating the chart: Each radius of the circle corresponds to the percentage of the vote Filner and DeMaio received in each neighborhood. The neighborhoods are grouped by area, as shown on the map below. The farther away from the circle's center, the higher percentage of the vote for the candidate. In **Pacific Beach**, for example, DeMaio beat Filner 52.7 percent to 47.3 percent.



What makes a Radar Chart “good”?

Characteristics

- ▶ Utilizes criteria where there is a clear value that corresponds to “better”
- ▶ All criteria must be weighted equally and have similar scales and values

Benefits (ASQ provided)

- ▶ Provides insight to potential improvement opportunities
- ▶ Helps to understand what variables are dominant for a given process
- ▶ Helps to understand which observations are most similar (are there clusters of observations?)
- ▶ Helps to understand if there are outliers
- ▶ Displays the performance metrics of any process and allows the viewer to see opportunities quickly

Creation

Analyzing Quality Scores by Employee/Team

Data in Excel

- ▶ Insert data in Excel and format as a table (optional, but will be needed if you want to add slicers)

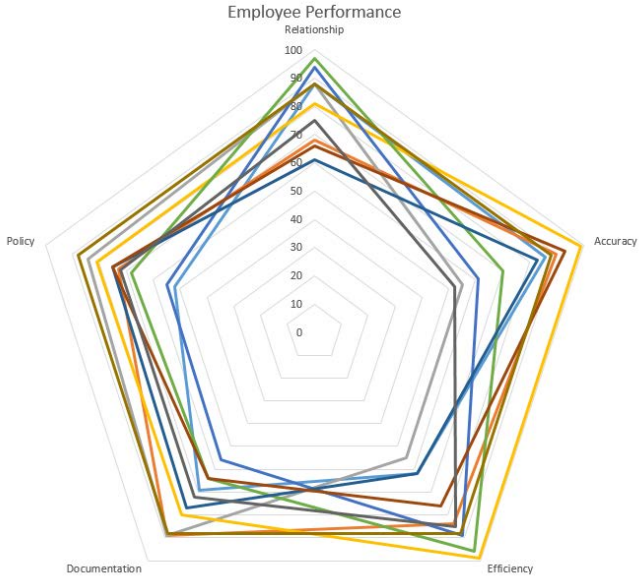
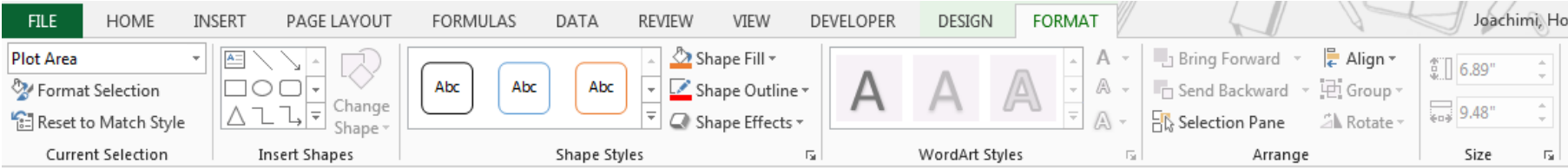
Representative	Team	Relationship	Accuracy	Efficiency	Documentation	Policy	
1	A		88	86	62	69	52
2	B		68	90	84	89	73
3	C		88	55	55	89	84
4	A		81	99	99	80	81
5	B		94	61	89	56	55
6	C		97	70	96	64	68
7	A		61	83	62	77	75
8	B		66	93	76	64	75
9	C		75	52	85	72	72
Goal	Goal		88	88	88	88	88

Insert Radar Chart

The screenshot shows the Microsoft Excel interface with the 'DESIGN' ribbon selected. The 'Charts' group is active, and the 'Radar' chart type is selected. The 'Radar' group contains three options: 'Radar - Axes', 'Radar - Grid Lines', and 'Radar - No Grid Lines'. The 'More Charts...' option is also visible at the bottom of the menu.

	A	B	C	D	E	F	G	K	L	M	N
1	Representative	Team	Relationship	Accuracy	Efficiency	Documentation	Policy				
2	1	A	88	86	62	69					
3	2	B	68	90	84	89					
4	3	C	88	55	55	89	84				
5	4	A	81	99	99	80	81				
6	5	B	94	61	89	56	55				
7	6	C	97	70	96	64	68				
8	7	A	61	83	62	77	75				
9	8	B	66	93	76	64	75				
10	9	C	75	52	85	72	72				
11	Goal	Goal	88	88	88	88	88				

Design & Format Chart

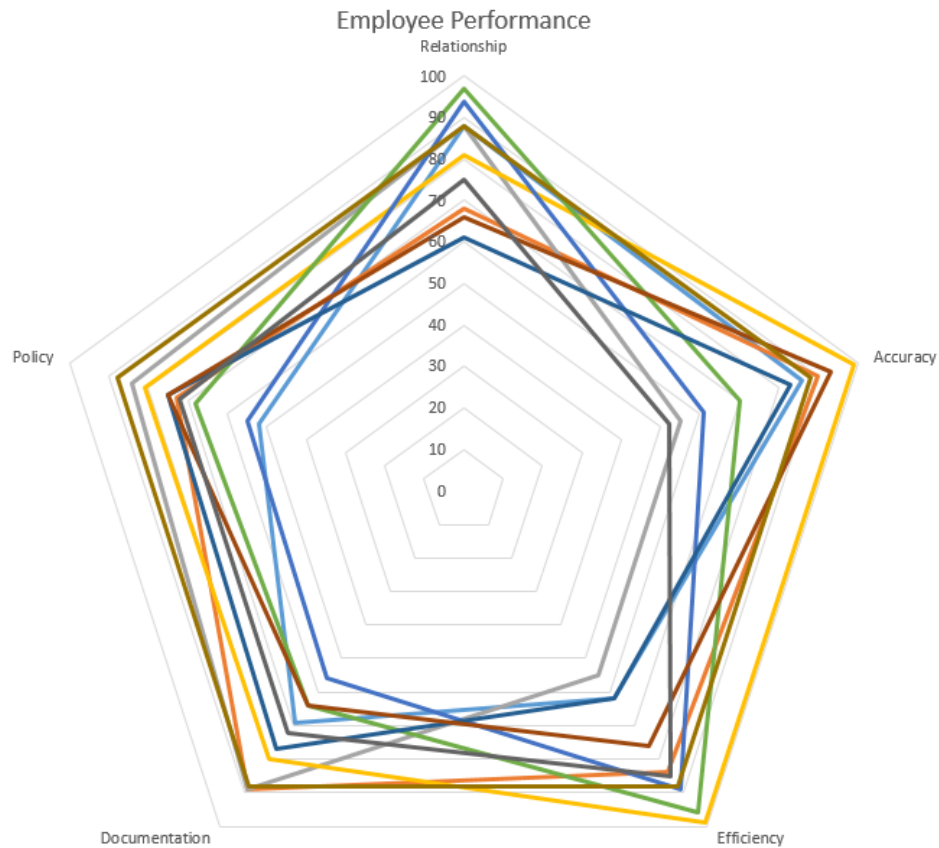


Insert Slicers (optional)

The screenshot shows the Microsoft Excel interface with the 'DESIGN' ribbon selected. The 'Slicer' button in the 'Filters' group is circled in green. An 'Insert Slicers' dialog box is open, displaying a list of data fields with checkboxes. The 'Representative' and 'Team' fields are selected. Below the dialog, two slicer objects are visible on the spreadsheet: one for 'Representative' and one for 'Team'.

	A	B	C	D	E	F	G
1	Representative	Team	Relationship	Accuracy	Efficiency	Documentation	Policy
2	1	A	88	86	62	69	52
3	2	B	68	90	84	89	73
4	3	C	88	55	55	89	84
5	4	A	81	99	99	80	81
6	5	B	94	61	89	56	55
7	6	C	97	70	96	64	68
8	7	A	61	83	62	77	75
9	8	B	66	93	76	64	75
10	9	C	75	52	85	72	72
11	Goal	Goal	88	88	88	88	88

Copy Slicers to Chart



Team

A

B

C

Goal

Representative

1

2

3

4

5

6

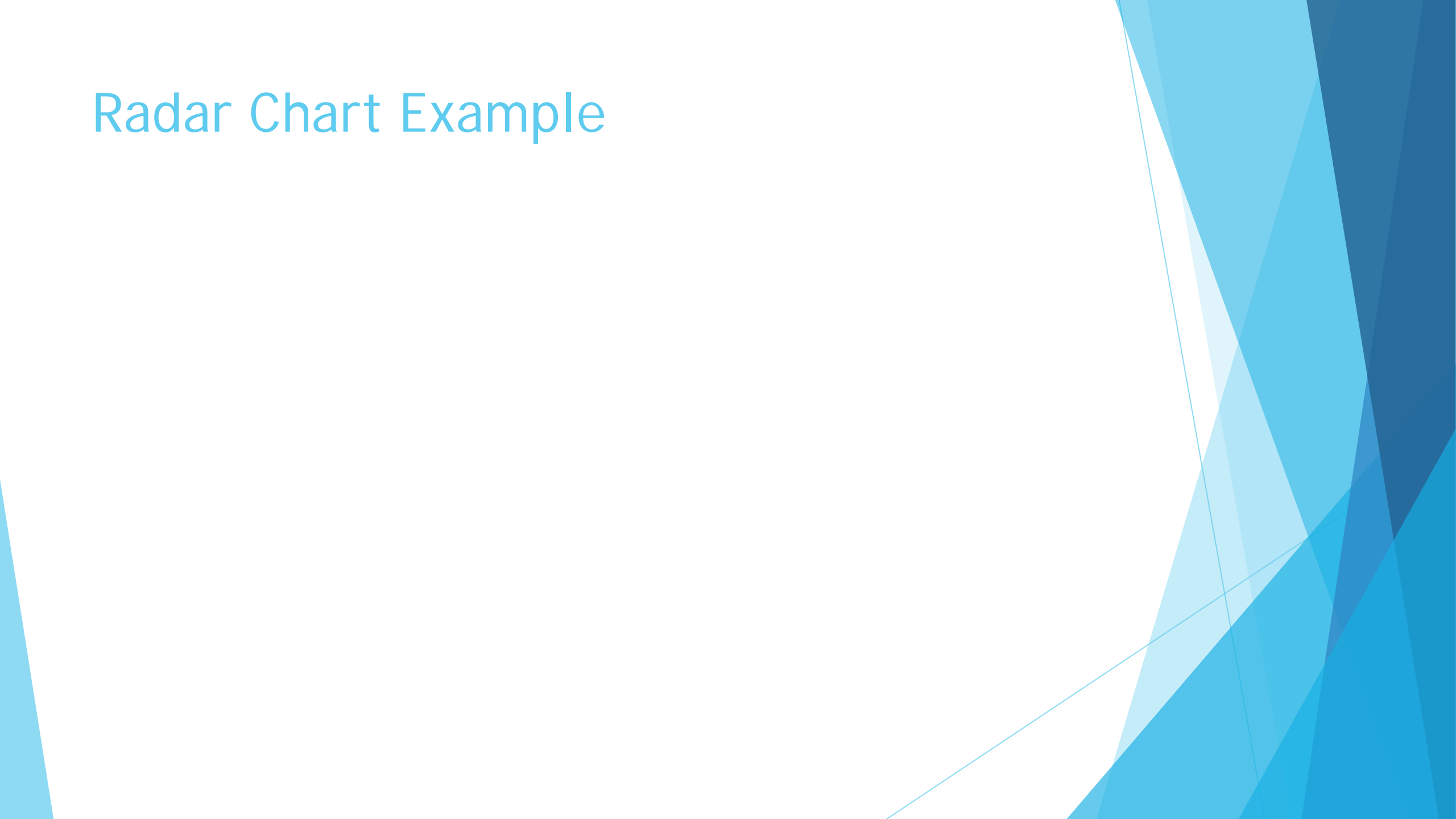
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Goal

Radar Chart Example



The background features abstract, overlapping geometric shapes in various shades of blue, ranging from light sky blue to deep navy blue. These shapes are primarily located on the right side of the slide, creating a modern, layered effect.

Questions?

Thank you for attending!