



**Hochschule für Technik
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University of Applied Sciences

Innovation Management Radar Graphs

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3. When should it be used?
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1. Introduction:

- Visual representations of data which can take on many forms
 - line
 - column/bar
 - pie
 - scatter
 - radar
 - petal

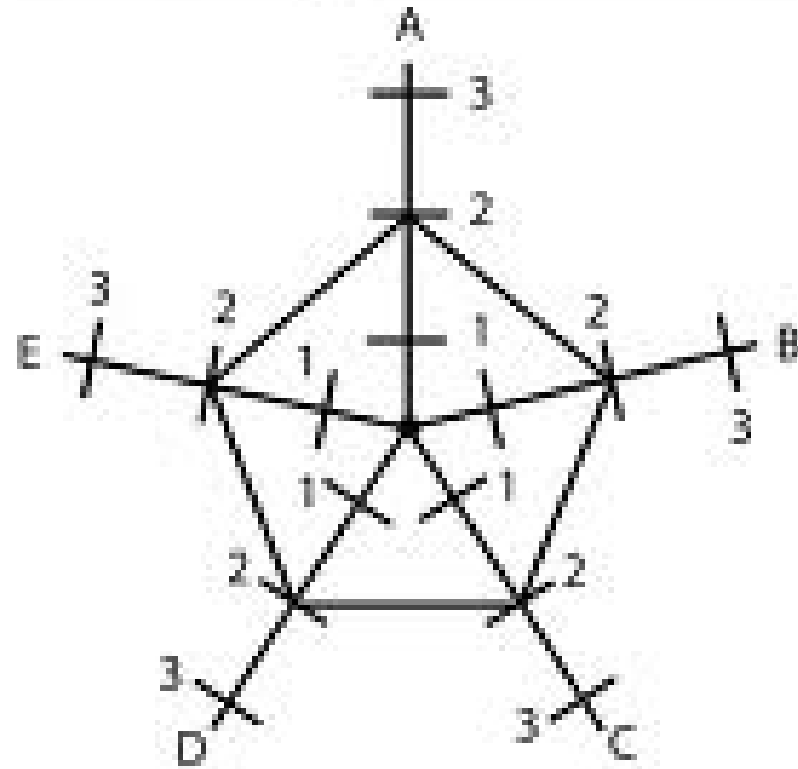
1. Introduction:

- Easier to use as they convey your point quickly without the need to understand every number in a table.
- Allow people to quickly:
 - absorb information
 - observe trends
 - easily interpolate and extrapolate data

2. What is a radar graph?

- A radar graph is another way to illustrate mathematical data
- Gets its name from the fact that it looks like an image from a radar screen

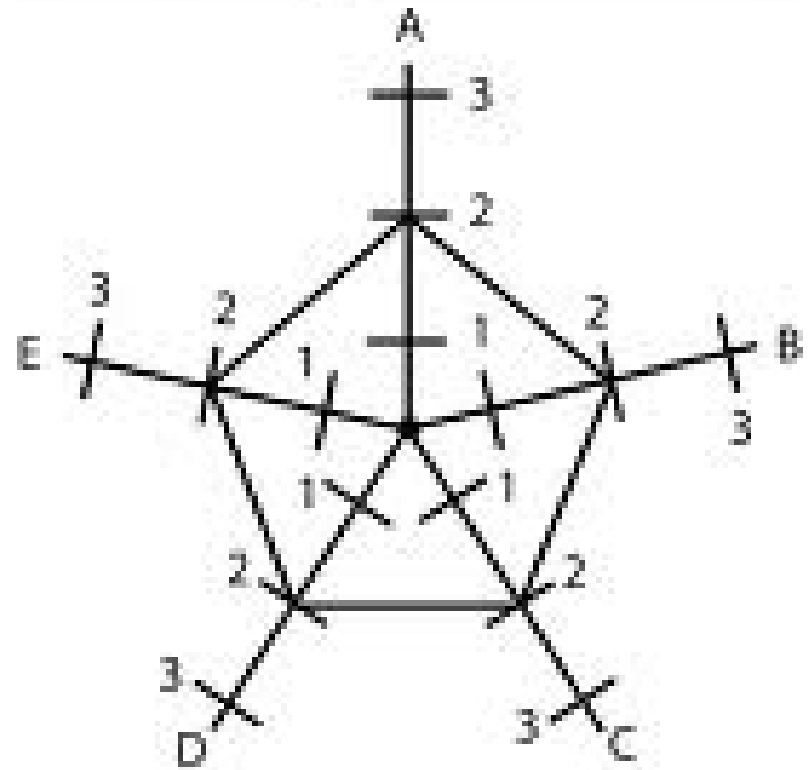
Basic Radar Graph



2. What is a radar graph?

- Has its zero starting point in the middle
- From the middle, each axis of the chart can protrude out like the spokes on a wheel
- At least 3 variables

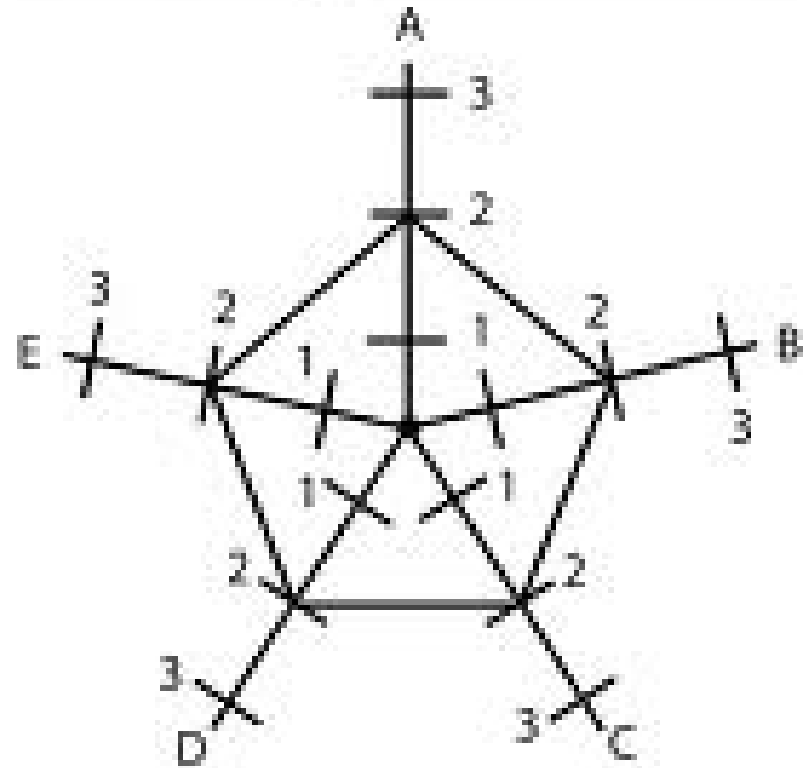
Basic Radar Graph



2. What is a radar graph?

- One axis for each subject, and there is no limit on the number of subjects that can be used
- Line is drawn connecting the data values for each spoke
- Gives the plot a star-like appearance

Basic Radar Graph



2. What is a radar graph?

- The data values increase the further away you get from the zero center of a radar graph
- The data must flow either in a clockwise or counterclockwise direction
- Also known as:
web chart, spider chart, star chart

3. When should it be used?

- For a quick visual interpretation of data from various sources
- It is not designed to be used for identifying the accuracy in data, but rather generalized relationships between data

3. When should it be used?

- Used when a single plot has more than two properties
- Objective: to assess the symmetry of the values rather than to compare their magnitudes

3. When should it be used?

- For science: mathematical and statistical applications
- For stocks
- Used to determine which person an employer should hire
- For sports to chart players' strengths and weaknesses

Example: Pro Evolution Soccer

BAR

▲ 팀워크 꺼짐



4-3-3

L1	R1
빅토르 발데스	1 GK
푸올	5 CB
올레구에르	23 CB
베레치	2 RSB
반 브롱크호스트	12 LSB
마르케스	4 DMF
자비	6 CMF
데코	20 CMF
지울리	8 ST
호나우딩요	10 ST
에투	9 CF

L2 R2



181 신장
25 나이
R 주발

GK
SW CB
SB
DMF WB
CMF SMF →
OMF
WG ST
CF

양쪽 사이드

ASN



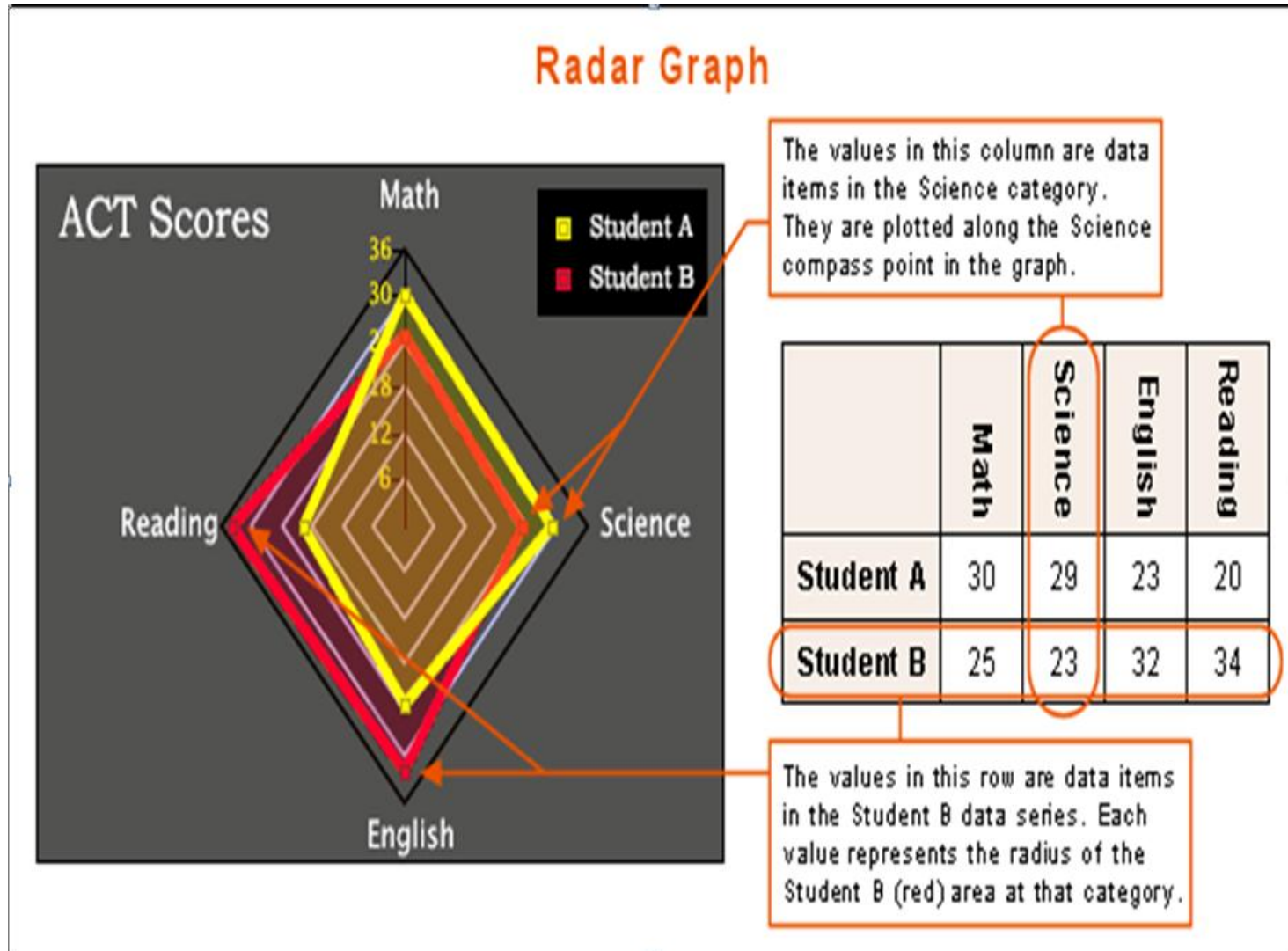
4-4-2

GK 1 레만
CB 28 콜로 투레
CB 23 캠벨
RSB 12 로렌 에타메
LSB 3 애슐리 콜
CMF 15 세스크
CMF 19 질베르투 실바
RMF 8 룽베리
LMF 7 피레
ST 9 레예스
CF 14 앙리

4. Using a radar chart in Excel to see the big picture.

- Sometimes it is hard to see the overall shape of the forest with the trees in your way
- Charts in Excel allow you to quickly see patterns

4. Using a radar chart in Excel to see the big picture



Practical example

4. Advantages and Disadvantages

Advantages:

- visually striking - can add interest to what would otherwise be a dry data presentation
- Primary way of displaying more than two or three values at once
- Excellent way to get a "feel" for data

4. Advantages and Disadvantages

Disadvantages:

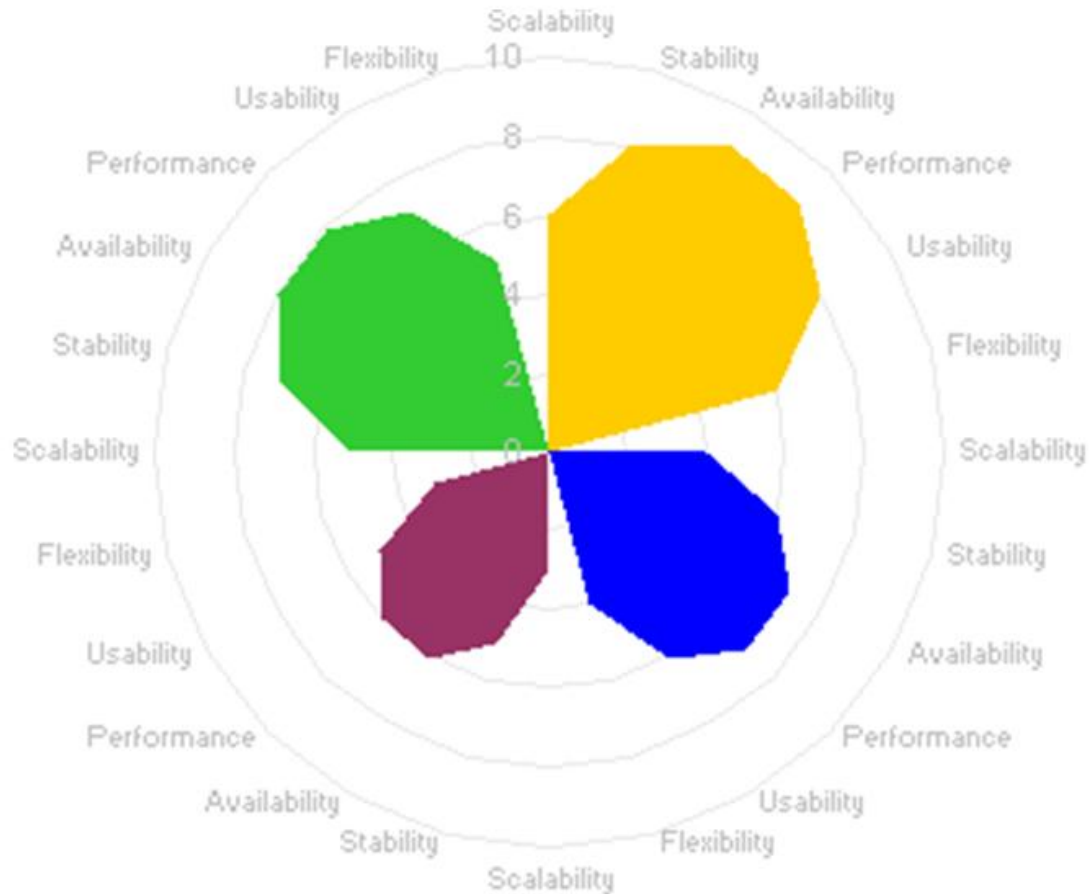
- Cannot compare more than two or three different plots at once
- Without coloring, can be difficult to tell which points belong to what

4. Advantages and Disadvantages

Disadvantages:

- With coloring, color could cover up similar looking plots
- Too many axis makes it difficult to read -
Less intuitive than other graph types

5. Alternatives: From Radar Charts to Petal Charts

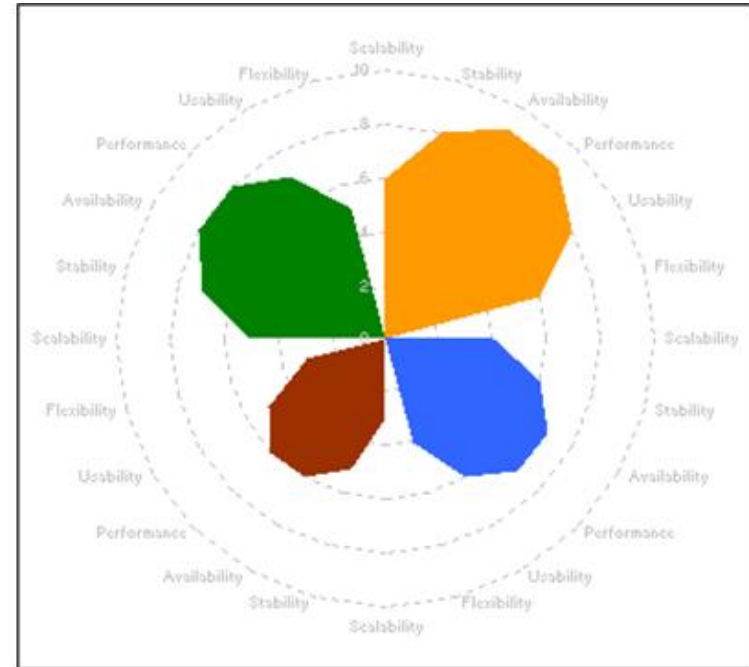


5. Alternatives:

From Radar Charts to Petal Charts

- Same thing as radar charts, just allows you to better understand the options and conclude the data
- Segregate the information yet provides comparability
- More visible

5. Alternatives: From Radar Charts to Petal Charts



	Sc	St	Av	Pf	Us	Fx
Option 1	6	8	9	9	8	6
Option 2	4	6	7	7	6	4
Option 3	3	5	6	6	5	3
Option 4	5	7	8	8	7	5

	Sc	St	Av	Pf	Us	Fx	Sc	St	Av	Pf	Us	Fx	Sc	St	Av	Pf	Us	Fx	Sc	St	Av	Pf	Us	Fx
Option 1	6	8	9	9	8	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Option 2	0	0	0	0	0	0	4	6	7	7	6	4	0	0	0	0	0	0	0	0	0	0	0	0
Option 3	0	0	0	0	0	0	0	0	0	0	0	0	3	5	6	6	5	3	0	0	0	0	0	0
Option 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	7	8	8	7	5

Conclusion:

- Radar graphs are a practical way of representing data with more than 2 properties
- However there are better alternatives that segregate information and convey a clearer view of the data

Sources

- Dörr, N., Müller-Prothmann, T. (2009), Innovations Management, in Carl Hanser Verlag München: p. 61, 62
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- <http://chandoo.org/wp/2008/09/18/better-radar-charts-excel/>
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Thank you for your attention.