

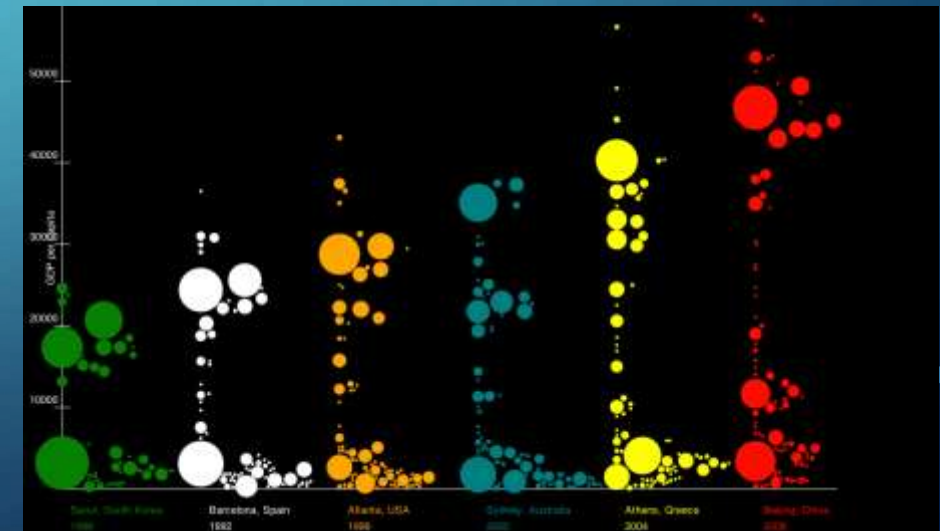
A decorative graphic on the left side of the slide, consisting of a network of white lines and small circles on a blue gradient background, resembling a circuit board or data flow diagram.

POWER OF DATA VISUALIZATION

ART OF CLASSIFYING DATA.

WHAT IS DATA VISUALIZATION?

- Data visualization is a general term that describes any effort to help people understand the significance of data by placing it in a visual context.



USES OF DATA VISUALIZATION.

- It enables decision makers to see analytics presented visually, so they can grasp difficult concepts or identify new patterns.
- With interactive visualization, you can take the concept a step further by using technology to drill down into charts and graphs



WHY IS DATA VISUALIZATION IMPORTANT?

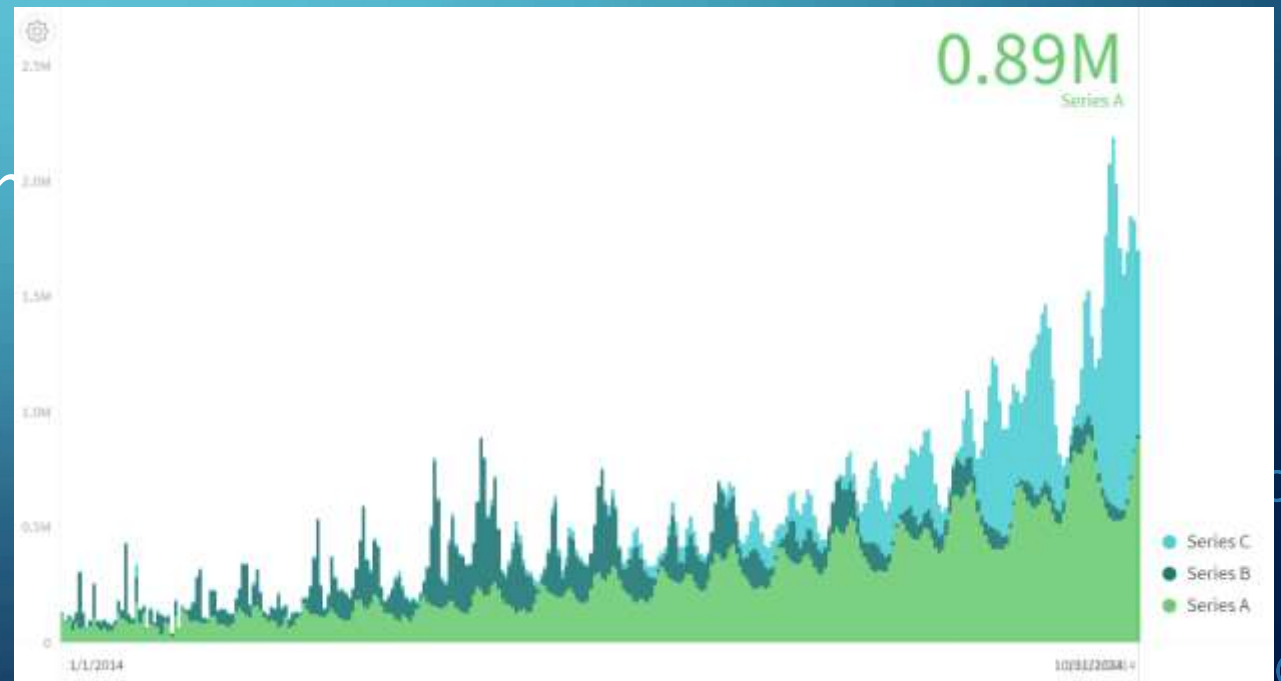
Data visualization can:

- Identify areas that need attention or improvement.
- Clarify which factors influence customer behaviour.
- Help you understand which products to place where.
- Predict sales volumes.



HOW IS IT BEING USED?

- Comprehend information quickly
- Identify relationships and patterns
- Pinpoint emerging trends
- Communicate the story to others



ADVANTAGES:

- Enhanced Assimilation of Business Information
- Quick Access to Relevant Business Insights
- Better Understanding of Operational & Business Activities
- Rapid Identification of Latest Trends
- Accurate Customer Sentiment Analysis
- Direct Interaction with Data
- Predictive Sales Analysis
- Drill-Down Sales Analysis
- Easy Comprehension of Data
- Customized Data-Visualization

AN ECONOMIST'S GUIDE TO VISUALIZING DATA

- Show the data.
- Reduce the clutter.
- Integrate the text and the graph.

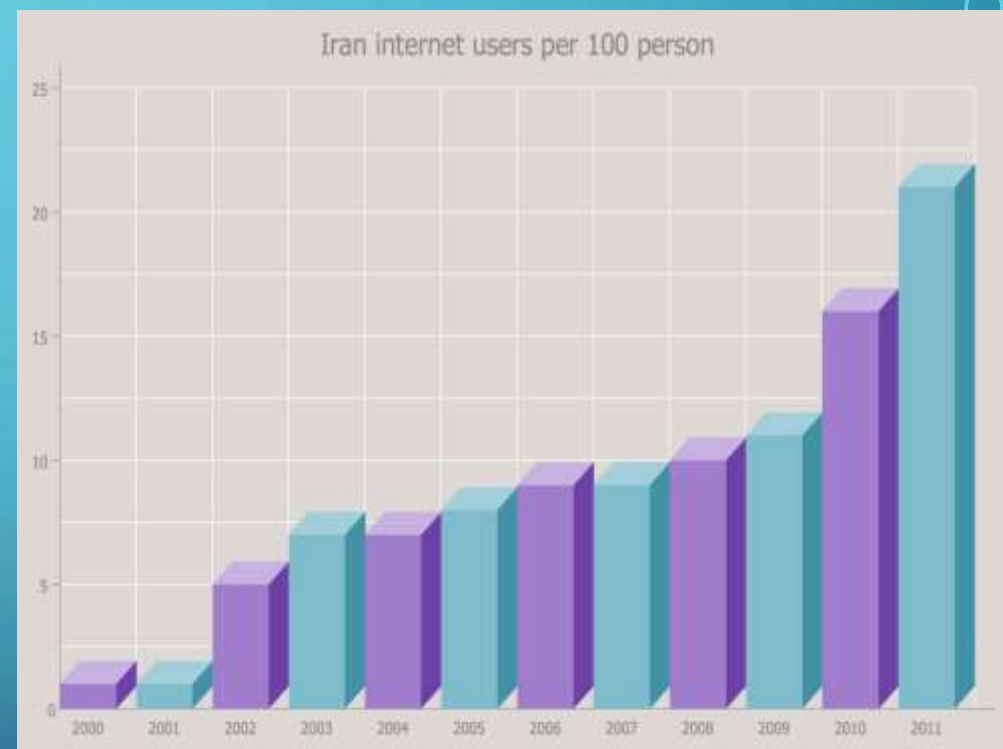


show me the data!

LEFT OR RIGHT? WHICH LOOKS APPEALING?

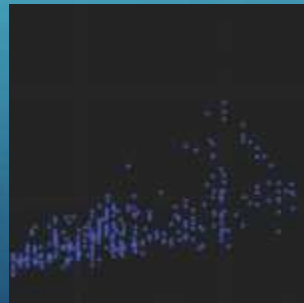
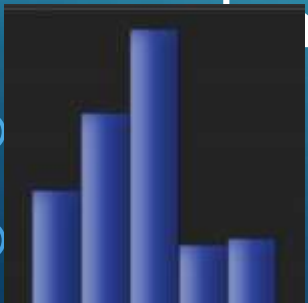
The first 20 observations of the BACK9 data set:

Output Dataset: BACK9								
Obs	subj	v_type	v_date	b_date	sex	state	country	hospital
1	230003	0	07/09/93	10/25/47	2	22	1	23
2	230004	0	01/04/94	08/15/23	2	38	1	23
3	230005	0	01/06/94	05/25/49	2	10	1	23
4	230006	0	01/06/94	04/24/49	2	21	1	23
5	230008	0	10/03/96	08/09/60	2	38	1	23
6	230009	0	10/31/96	11/13/50	1	38	1	23
7	310020	0	06/18/93	08/09/43	2	43	1	31
8	310032	0	08/03/93	04/02/34	2	13	1	31
9	310037	0	11/08/93	04/25/39	2	36	1	31
10	310041	0	10/27/93	11/01/26	2	43	1	31
11	310049	0	02/04/94	10/03/31	2	25	1	31
12	310055	0	07/12/94	12/11/56	2	36	1	31
13	310056	0	04/01/94	11/16/61	2	36	1	31
14	310059	0	06/13/94	08/22/34	2	43	1	31
15	310065	0	06/30/94	07/27/56	2	36	1	31
16	310069	0	09/23/94	07/14/42	2	36	1	31
17	310072	0	09/08/94	12/20/46	2	43	1	31
18	310073	0	09/26/94	02/27/33	2	36	1	31
19	310074	0	11/14/94	12/11/68	2	5	1	31
20	310080	0	12/16/94	03/14/57	2	36	1	31



DECIDING WHICH VISUAL IS BEST

- One of the biggest challenges for business users is deciding which visual should be used to best represent the information.
- When you're first exploring a new data set, auto charts are especially useful because they provide a quick view of large amounts of data. This data exploration capability is helpful even to experienced statisticians as they seek to speed up the analytics lifecycle process because it eliminates the need for repeated sampling to determine which data is appropriate for a model.



KEY POINTS:

- Data visualization tool can be a real powerful tool.
- Always bear in mind the users/audience of the data visualisation.



CONCLUSION

- Data visualization is going to change the way our analysts work with data. They're going to be expected to respond to issues more rapidly. And they'll need to be able to dig for more insights – look at data differently, more imaginatively. Data visualization will promote that creative data exploration.

The background is a blue gradient. In the corners, there are white line-art designs resembling circuit boards or neural networks, with lines and small circles connecting them.

THANK YOU