

Step 10 Visualisation

18th JRC Annual training on Composite Indicators and Scoreboards

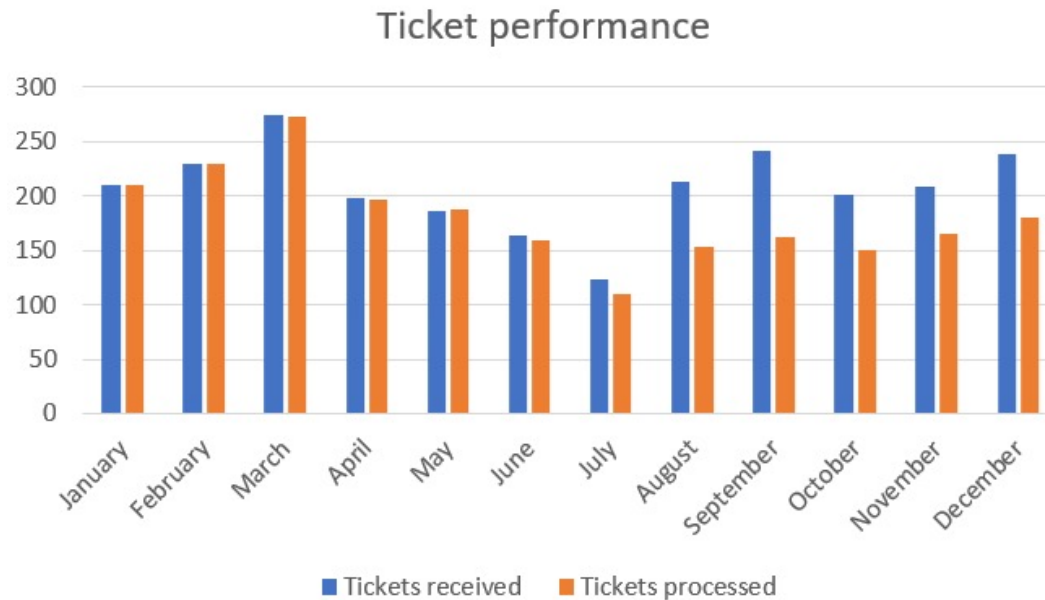
Carlos Moura

10 Steps to build a Composite Indicator



Data has an important story to tell

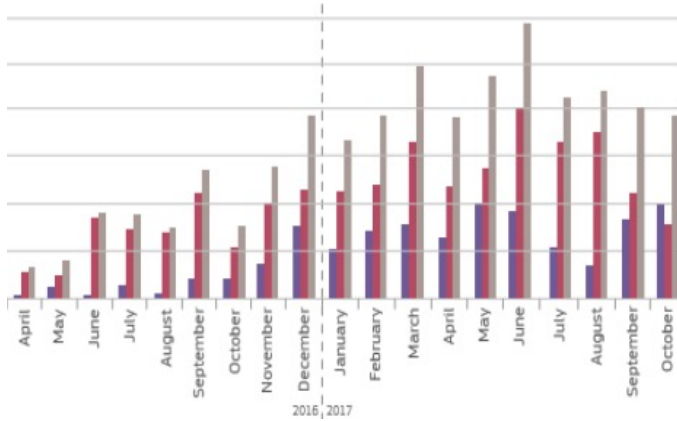
Choosing the right visualization



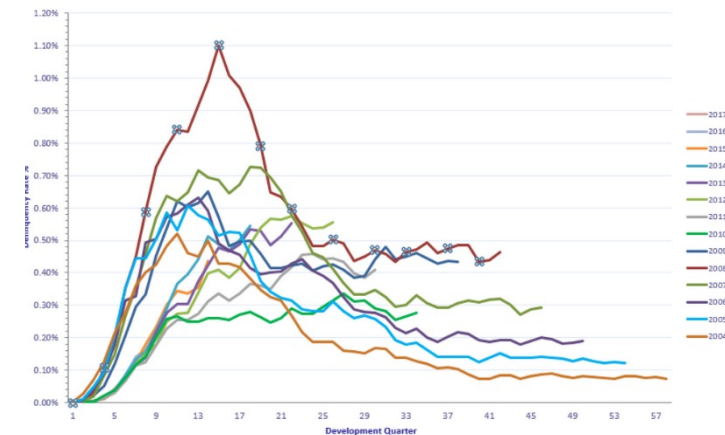
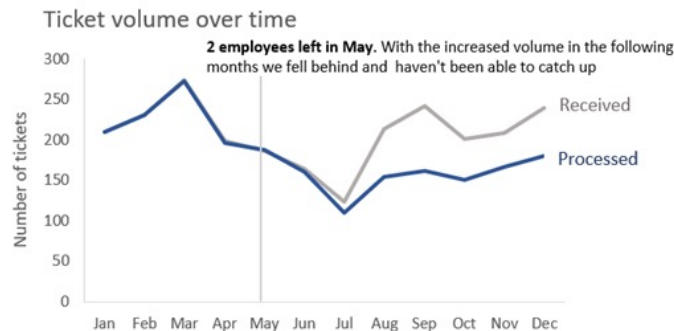
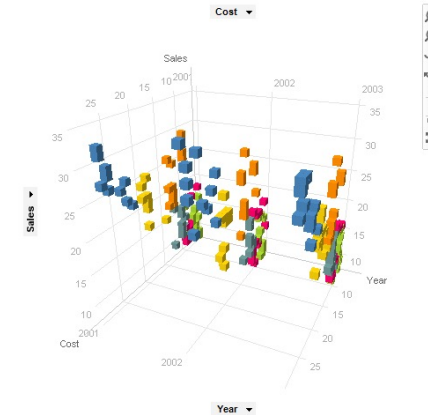
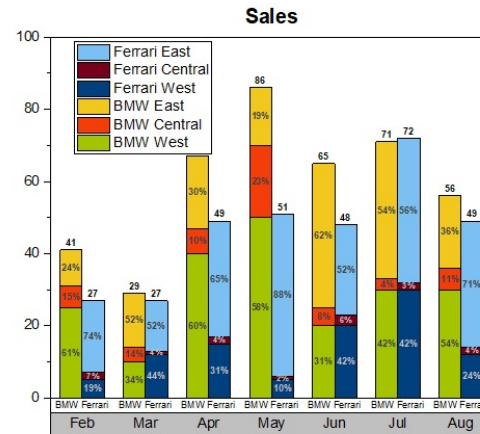
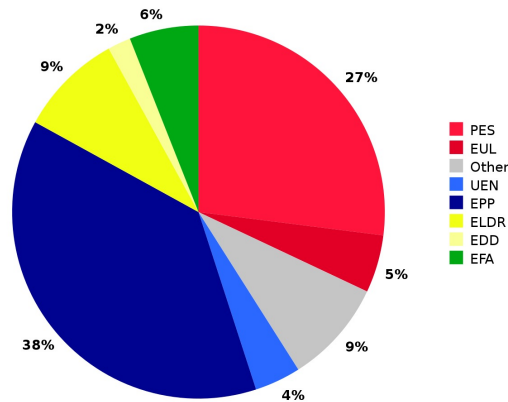
Data Visualization is about how you want to tell that story

Just show me the numbers!

There are more charts in the world, Horatio...



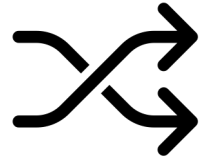
European Parliament election, 2004



How to communicate effectively with data?

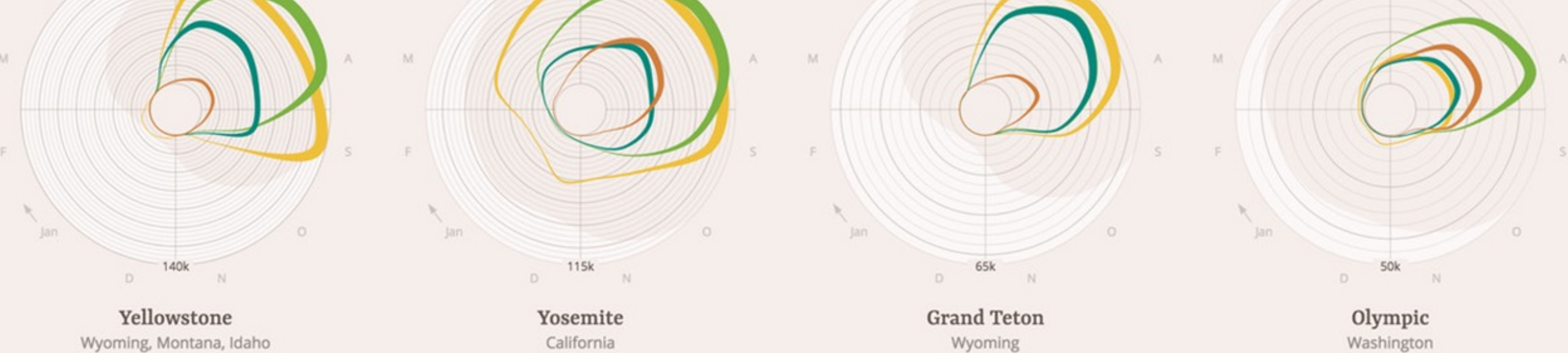
It depends

- On the data
- On the context
- On the message



Some vague guidelines

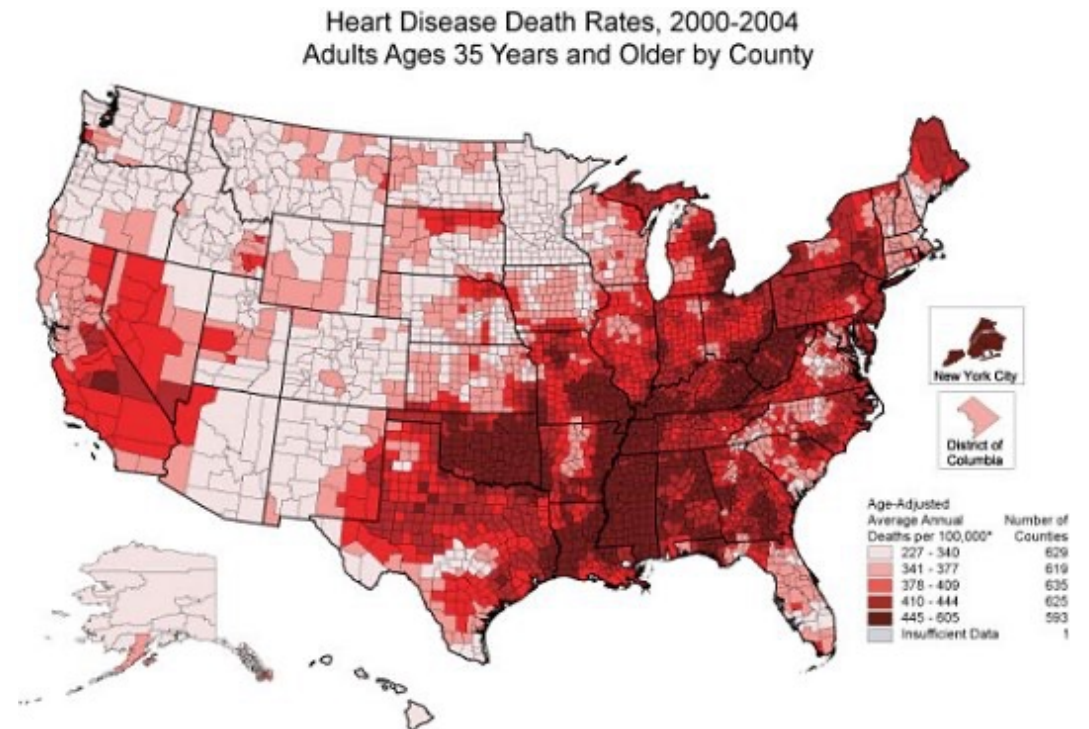
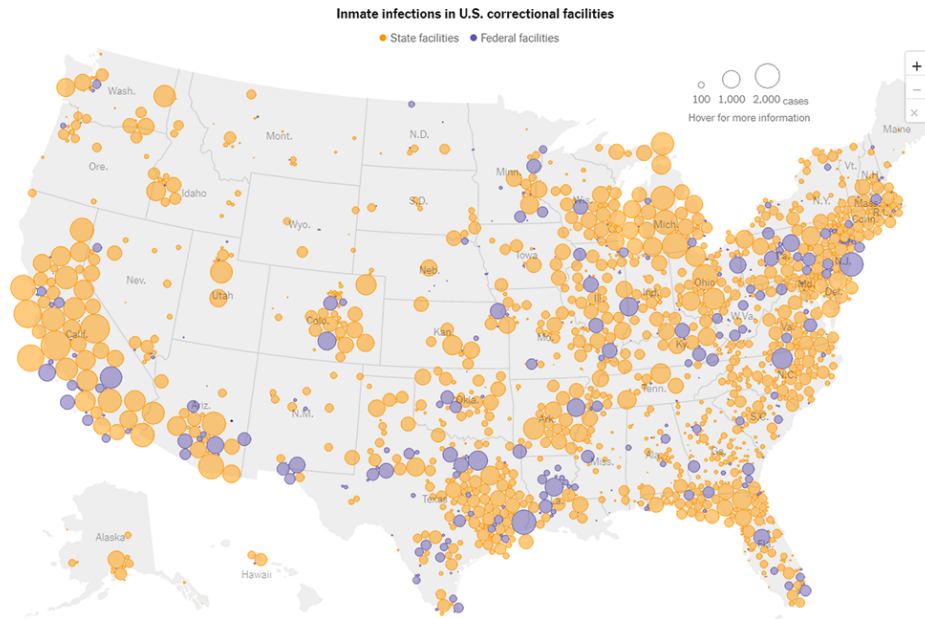
- Understand the context
- Choose the appropriate visual display
- Eliminate clutter (simple is better)
- Focus attention where you want it
- Tell a story



5 qualities of an impactful visualization

- Truthful
- Functional
- Beautiful
- Insightful
- Enlightening

Remember the message



Do we even need a chart?

	AMERICAS	ASIA-ROW	EUROPE	WORLD
FY 16	4	1	1	2
H1 16	4	5	1	3
H1 17	7	3	3	1

Unit: %



Visual perception

AMC D F R E E S H P O F Q H O P I U O I U L F K S D K
F K F J Z F C P T H B M U G I N D I C A T O R S D H D X
B E W Z C O M P O S I T E A E T F R J L M N O J K P B R
L A D X O G F J E I L K S A P R P I Z Z A H M X O Q B I B

AMC D F R E E S H P O F Q H O P I U O I U L F K S D K
F K F J Z F C P T H B M U G **I N D I C A T O R S** D H D X
B E W Z **C O M P O S I T E** A E T F R J L M N O J K P B R
L A D X O G F J E I L K S A P R P I Z Z A H M X O Q B I B

AMCD**FREE**SHPOFQHOPIUOIULFKSDK
FKFJZFCPTHBMUG**INDICATORS**DH DX
BEWZ**COMPOSITE**AETFRJLMNOJKPBR
LADXOGFJEILKSAPR**PIZZA**HMXOQBIB

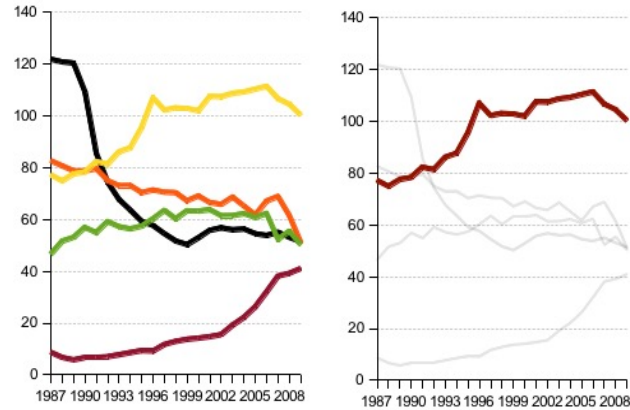
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BEWZ**COMPOSITE**AETFRJLMNOJKPBR
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AMCDFREESHPOFQHOPIUOIULFKSDK
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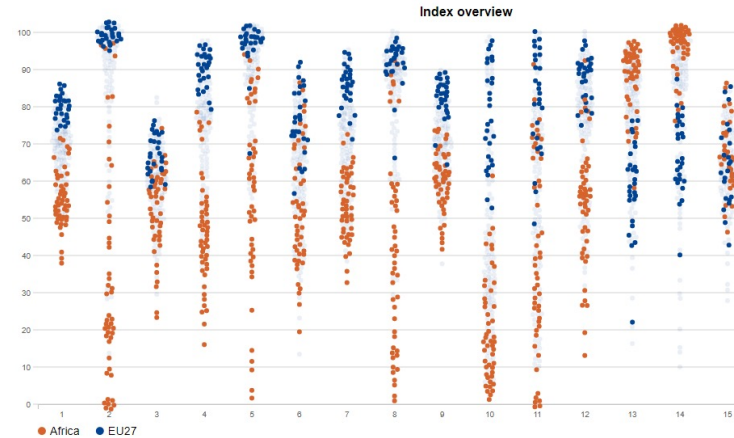
Visualization uses **perception** to free cognition

Preattentive attributes on charts

Colour

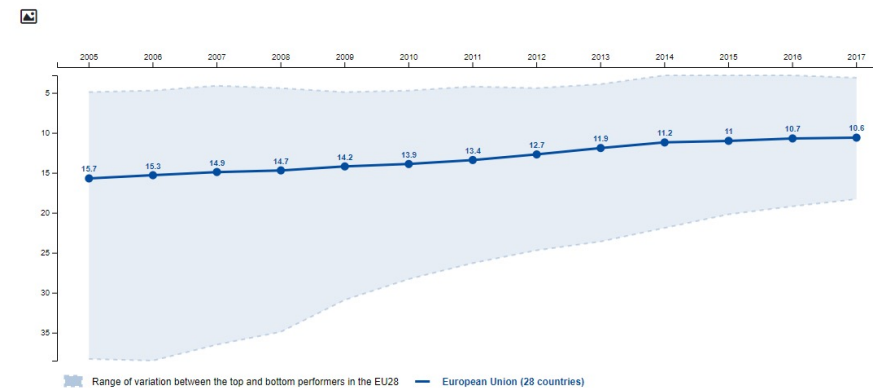


Position



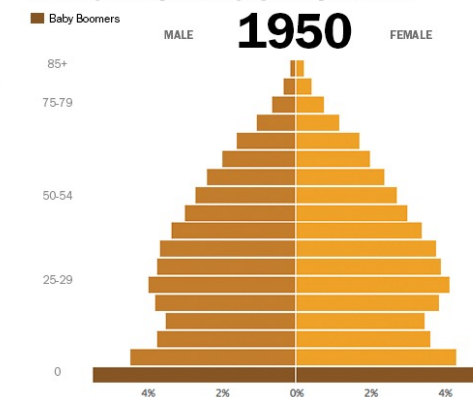
Form

Early leavers from education and training



Motion

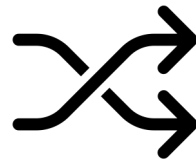
Percent of U.S. Population by Age Group, 1950-2060



How to communicate effectively?

It depends

- On the data
- On the context
- On the message



Some vague guidelines

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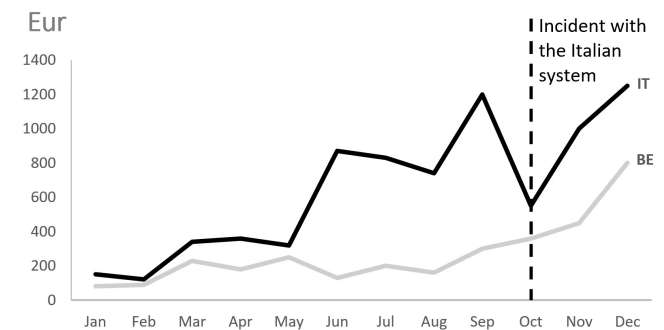
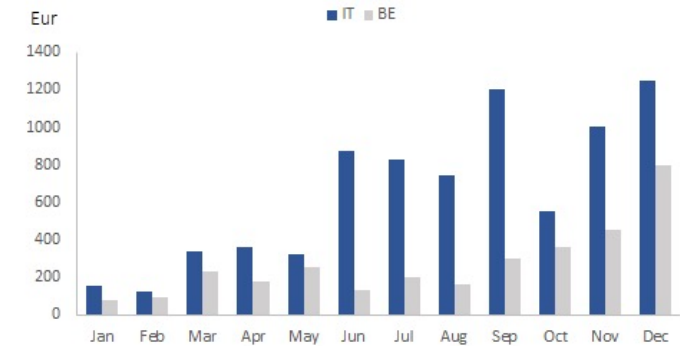
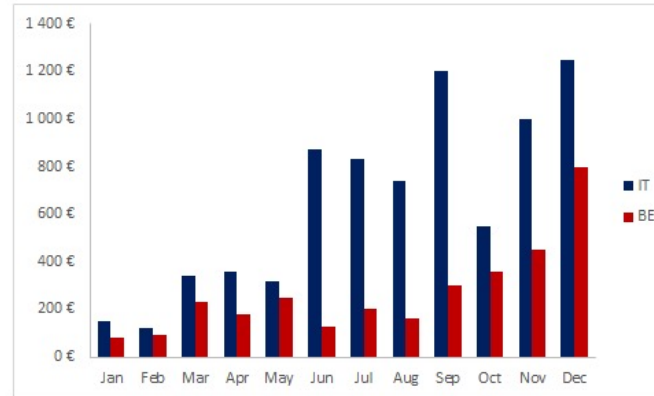
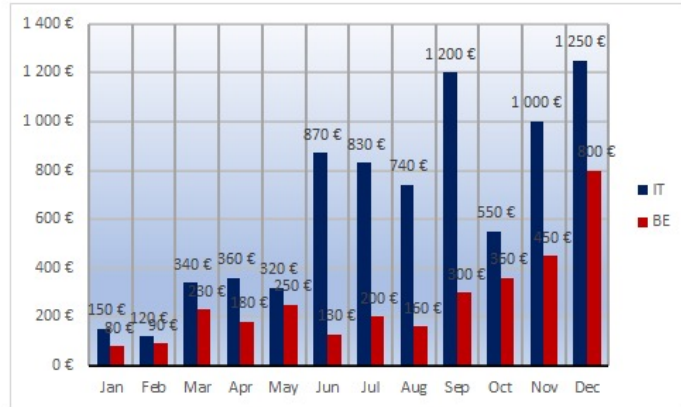
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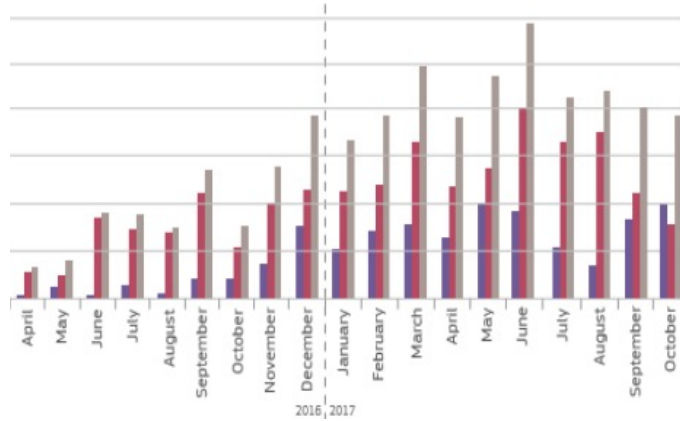
Eliminate clutter



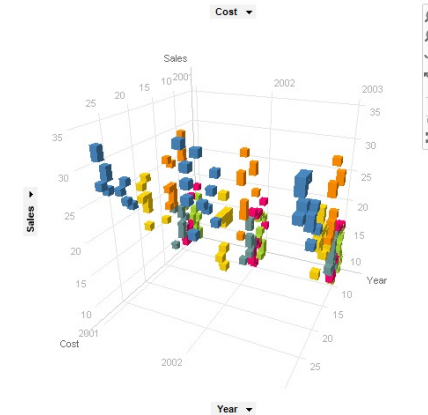
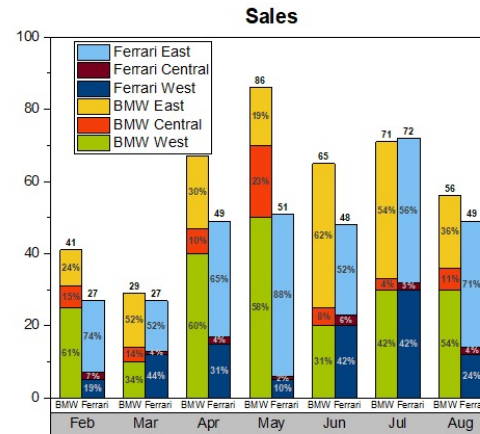
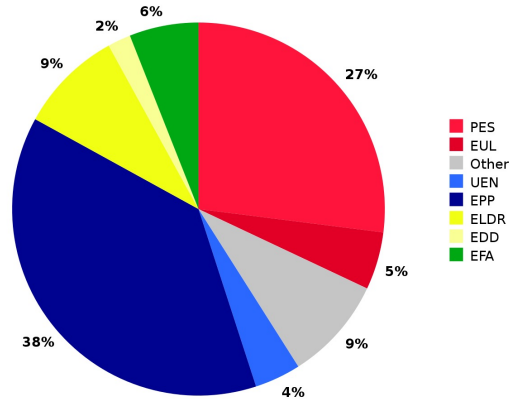
Eliminate clutter



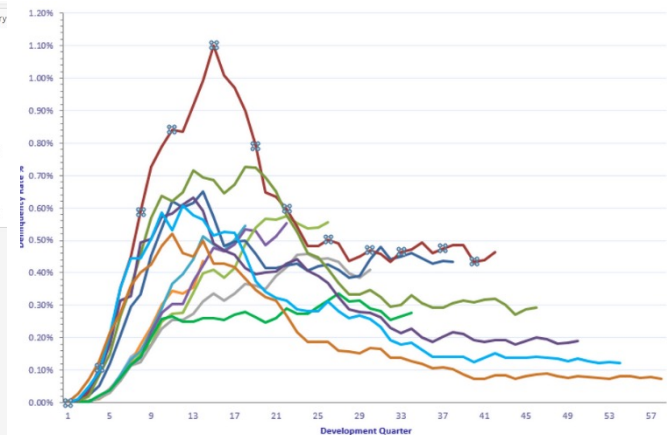
From representing data...



European Parliament election, 2004



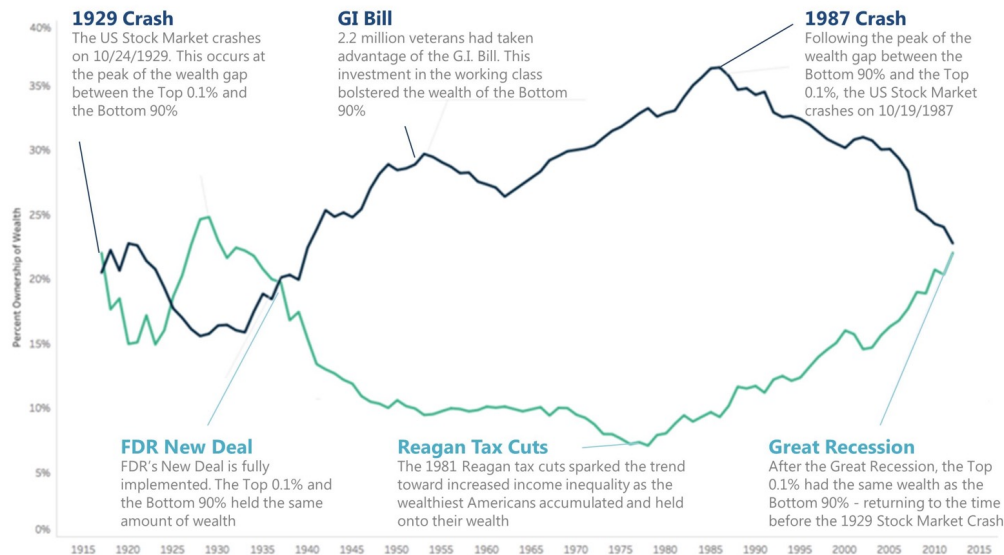
1 bar chart for sales- DataFlair



...to telling stories with data

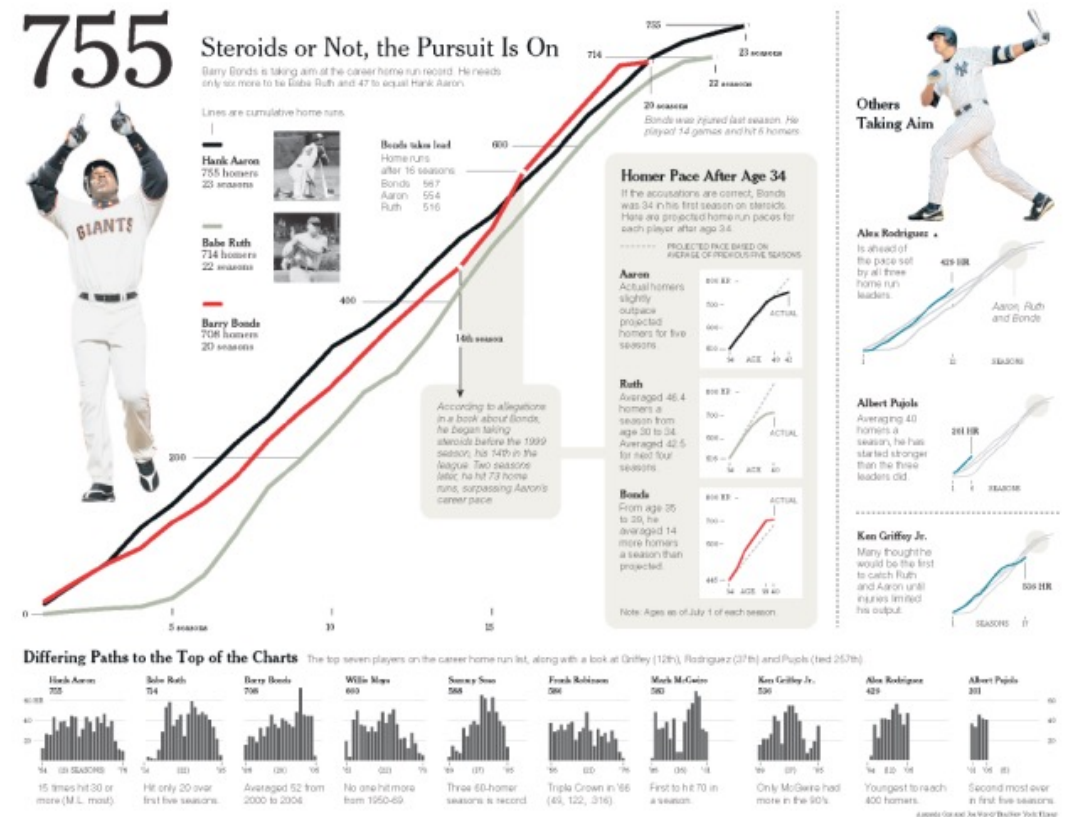
The Wealth Gap

A historical view of wealth ownership within the **Top 0.1%** and the **Bottom 90%** of US households



Source: <http://www.businessinsider.com/share-of-us-household-wealth-by-income-level-2016-11>

Designer: <https://twitter.com/sinvalgo>



Thank you



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