AN UNDERSTANDING OF INFOGRAPHICS

ZULHAN RUDYANSYAH

STATCAB INFOGRAPHIC
TRAINING COURSE
Kuwait City, February 20th, 2018

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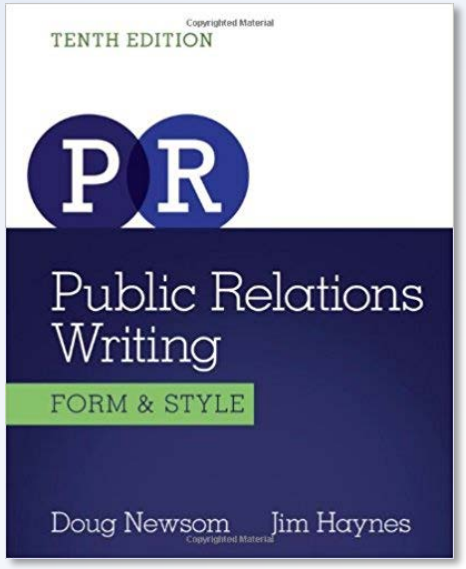
OUTLINE

1. What is an Infographic
2. How to Make Infographics
3. Interesting Data or Information
4. Visually Appealing Story
5. Easy to Understand Design
6. The Do's & Don'ts of Infographics Making
7. The Do's & Don'ts of Chart Making
8. Mistakes of Infographics Design
9. Introduction of Infographic Software Maker

WHAT IS AN INFOGRAPHIC

1

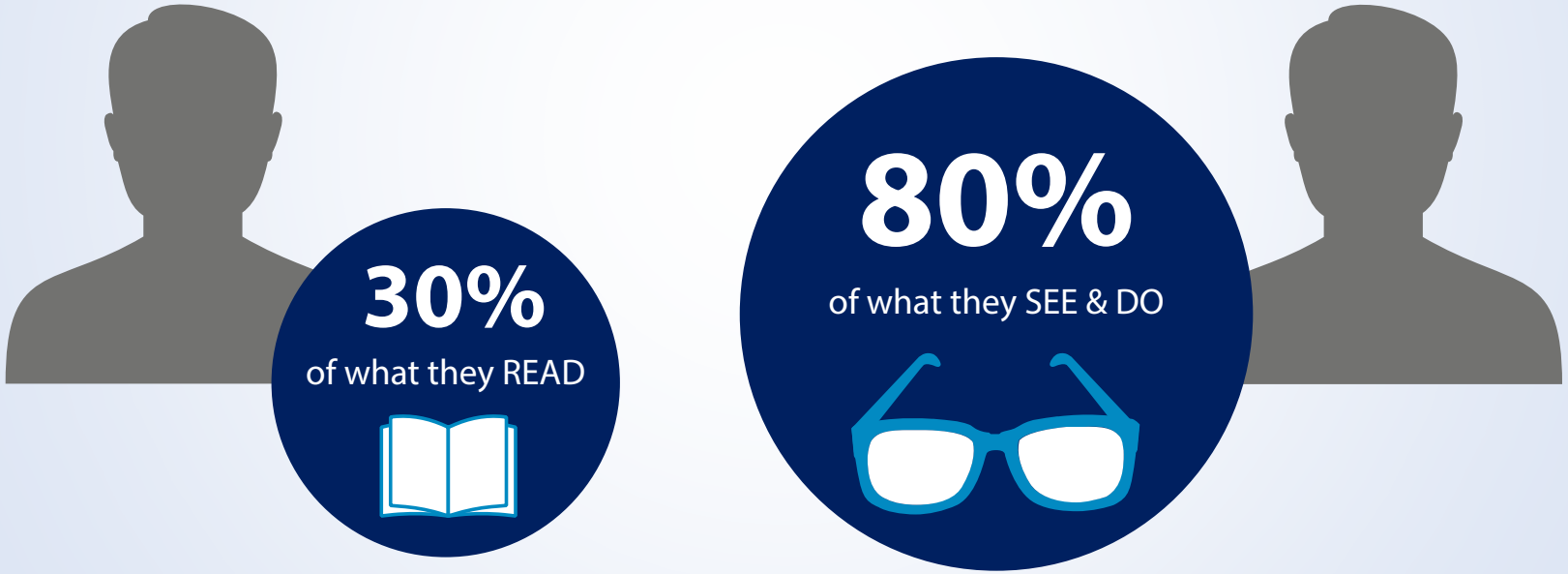


Infographics (a clipped compound of "information" and "graphics") are graphic visual representations of information, data or knowledge intended to present information quickly and clearly.

Doug Newsom and Jim Haynes (2004). *Public Relations Writing: Form and Style*. p.236.

WHY WE USE INFOGRAPHICS

Multimedia also leaves a lasting impression



Source: Lester, P.M. (2006). Syntactic Theory of Visual Communication

It only takes us 150 milliseconds to process an image
(60,000x faster)

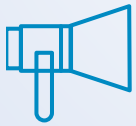
http://neomam.com/interactive/13reasons/

WHERE WE USE INFOGRAPHICS

Illustrating data: This means taking data from surveys (and similar functions) and making them more interesting than your average chart.

Simplifying a complex subject: If you've got a rather mind-boggling concept, and need a way to break it down quickly and easily, infographics are the way to go.

Making comparisons: Infographics are great at showing when two things are incredibly similar or different.

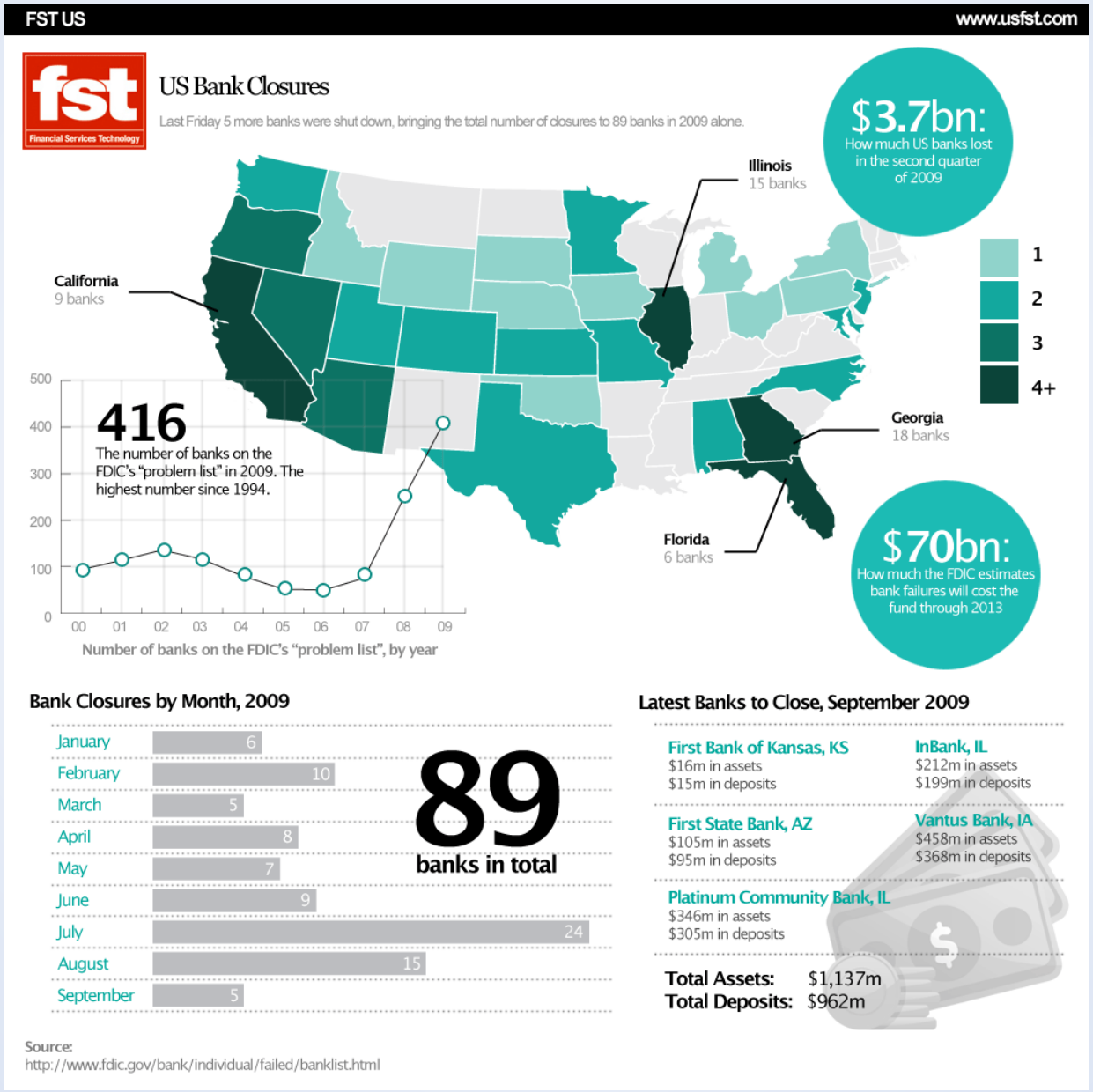


Awareness: Whether it's related to business, politics or any other arena, you can quickly raise awareness of a brand or cause with shareable infographics.

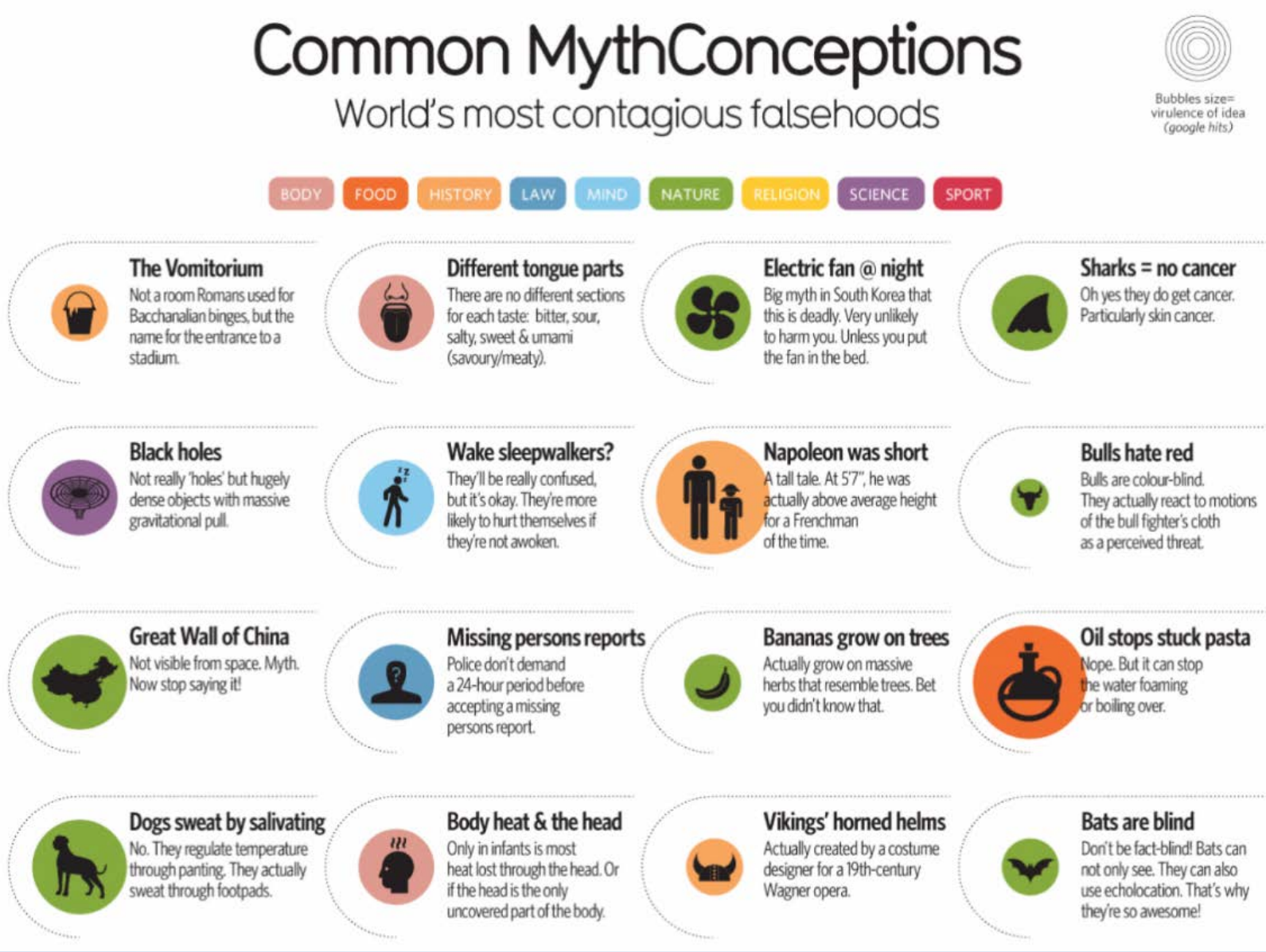
TYPES OF INFOGRAPHICS

1. Mixed charts
2. Informational / List
3. Timeline
4. How-to
5. Process
6. Comparison
7. Location
8. Photo-graphic
9. Hierarchical
10. Single chart
11. Visualized Numbers
12. Anatomical
13. Visual Resume

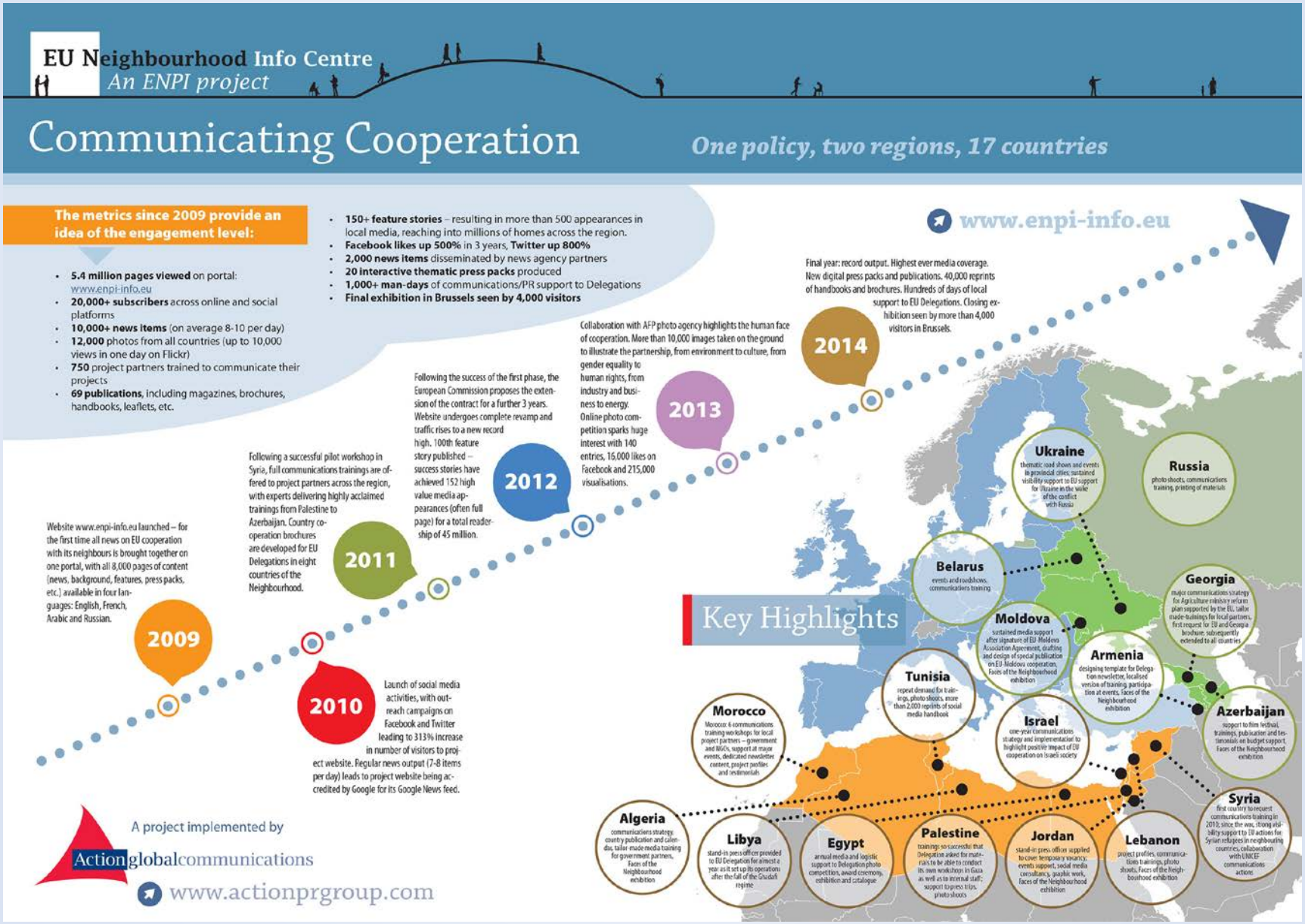
1. Mixed charts



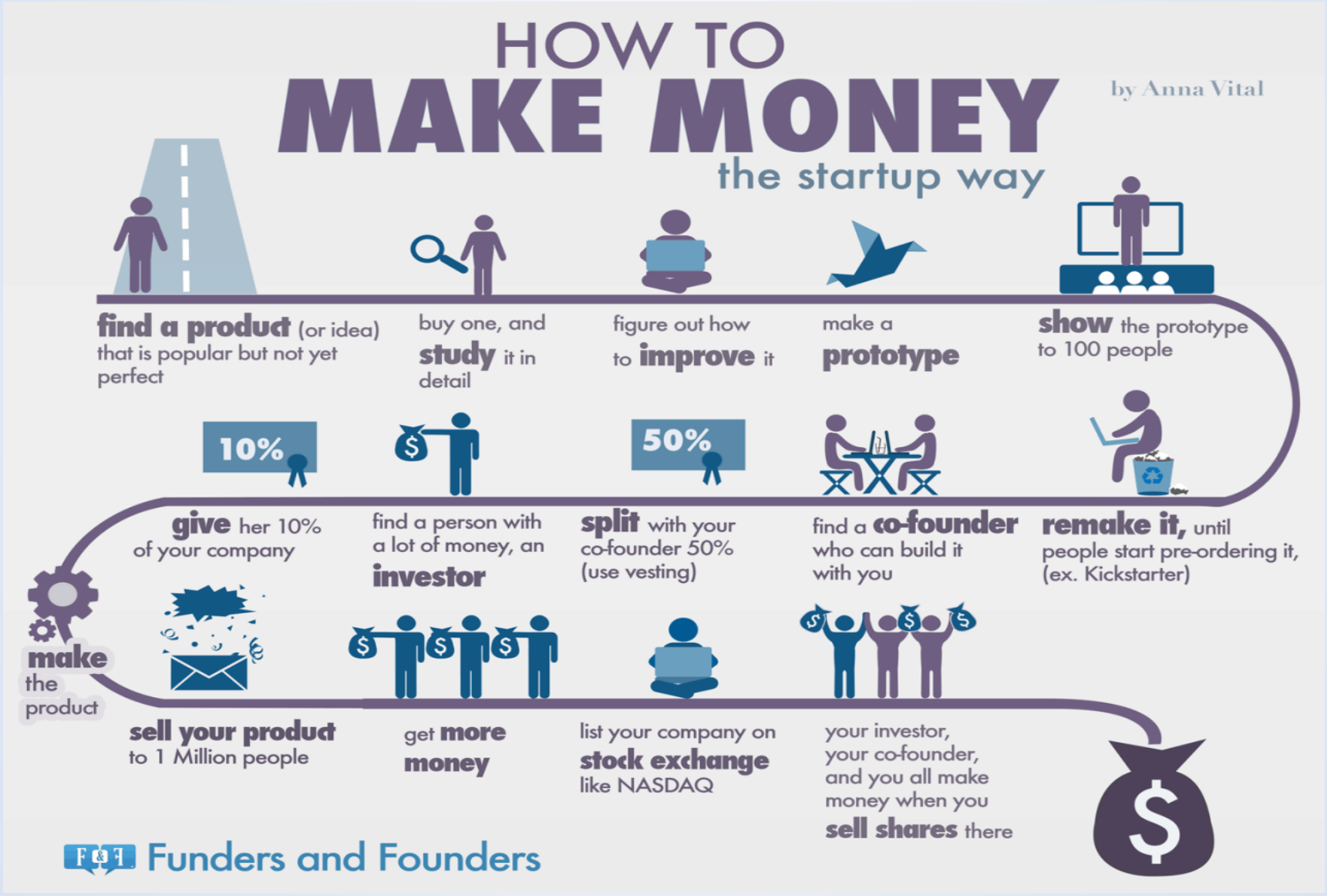
2. Informational / List



3. Timeline


EU Neighbourhood Info Centre
An ENPI project
Communicating Cooperation
One policy, two regions, 17 countries
The metrics since 2009 provide an idea of the engagement level:
5.4 million pages viewed on portal: www.enpi-info.eu
20,000+ subscribers across online and social platforms
10,000+ news items (on average 8-10 per day)
12,000 photos from all countries (up to 10,000 views in one day on Flickr)
750 project partners trained to communicate their projects
69 publications, including magazines, brochures, handbooks, leaflets, etc.
150+ feature stories – resulting in more than 500 appearances in local media, reaching into millions of homes across the region.
Facebook likes up 500% in 3 years, Twitter up 800%
2,000 news items disseminated by news agency partners
20 interactive thematic press packs produced
1,000+ man-days of communications/PR support to Delegations
Final exhibition in Brussels seen by 4,000 visitors
www.enpi-info.eu
2009
Website www.enpi-info.eu launched – for the first time all news on EU cooperation with its neighbours is brought together on one portal, with all 8,000 pages of content (news, background, features, press packs, etc.) available in four languages: English, French, Arabic and Russian.
2010
Launch of social media activities, with outreach campaigns on Facebook and Twitter leading to 313% increase in number of visitors to project website. Regular news output (7-8 items per day) leads to project website being accredited by Google for its Google News feed.
2011
Following a successful pilot workshop in Syria, full communications trainings are offered to project partners across the region, with experts delivering highly acclaimed trainings from Palestine to Azerbaijan. Country cooperation brochures are developed for EU Delegations in eight countries of the Neighbourhood.
2012
Following the success of the first phase, the European Commission proposes the extension of the contract for a further 3 years. Website undergoes complete revamp and traffic rises to a new record high. 100th feature story published – success stories have achieved 152 high value media appearances (often full page) for a total readership of 45 million.
2013
Collaboration with AFP photo agency highlights the human face of cooperation. More than 10,000 images taken on the ground to illustrate the partnership, from environment to culture, from gender equality to human rights, from industry and business to energy. Online photo competition sparks huge interest with 140 entries, 16,000 likes on Facebook and 215,000 visualisations.
2014
Final year: record output. Highest ever media coverage. New digital press packs and publications. 40,000 reprints of handbooks and brochures. Hundreds of days of local support to EU Delegations. Closing exhibition seen by more than 4,000 visitors in Brussels.
Key Highlights
Ukraine
thematic road shows and events in provincial cities; sustained visibility support to EU support for Ukraine in the wake of the conflict with Russia
Russia
photo shoots, communications training, printing of materials
Belarus
events and roadshows, communications training
Georgia
major communications strategy for Agriculture ministry reform plan supported by the EU; tailor made-trainings for local partners, first request for EU and Georgia brochure subsequently extended to all countries
Moldova
sustained media support after signature of EU-Moldova Association Agreement, drafting and design of special publication on EU-Moldova cooperation, Faces of the Neighbourhood exhibition
Armenia
designing template for Delegation newsletter, localised version of training, participation at events, Faces of the Neighbourhood exhibition
Tunisia
repeat demand for trainings, photo shoots, more than 2,000 reprints of social media handbook
Morocco
Morocco 6 communications training workshops for local project partners – government and NGOs, support at major events, dedicated newsletter content, project profiles and testimonials
Israel
one-year communications strategy and implementation to highlight positive impact of EU cooperation on Israeli society
Azerbaijan
support to film festival, trainings, publication and testimonials on budget support, Faces of the Neighbourhood exhibition
Syria
first country to request communications training in 2010; since the war, strong visibility support to EU actions for Syrian refugees in neighbouring countries, collaboration with UNICEF communications actions
Algeria
communications strategy, country publication and calendar, tailor-made media training for government partners, Faces of the Neighbourhood exhibition
Libya
stand-in press officer provided to EU Delegation for almost a year as it set up its operations after the fall of the Gaddafi regime
Egypt
annual media and logistic support to Delegation photo competition, award ceremony, exhibition and catalogue
Palestine
trainings so successful that Delegation asked for materials to be able to conduct its own workshops in Gaza as well as to internal staff; support to press trips, photo shoots
Jordan
stand-in press officer supplied to cover temporary vacancy, events support, social media consultancy, graphic work, Faces of the Neighbourhood exhibition
Lebanon
project profiles, communications trainings, photo shoots, Faces of the Neighbourhood exhibition
A project implemented by
Actionglobalcommunications
www.actionprgroup.com

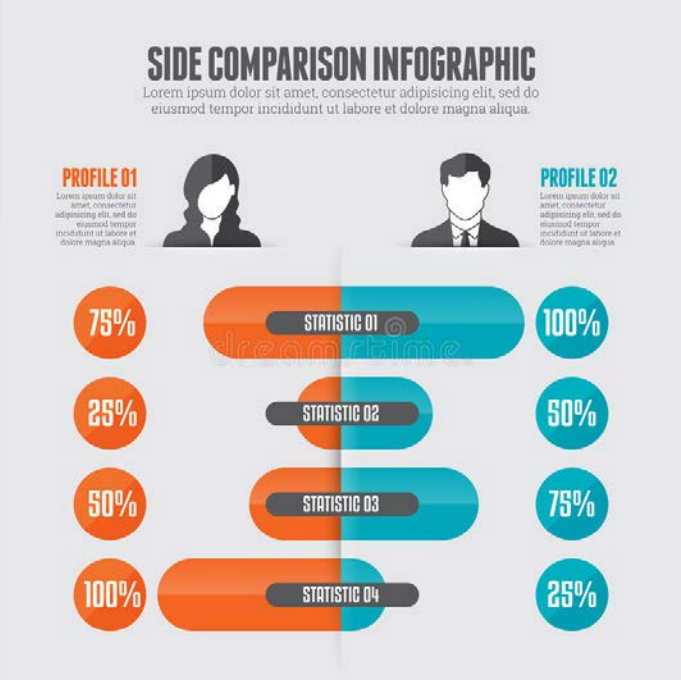
4. How-to

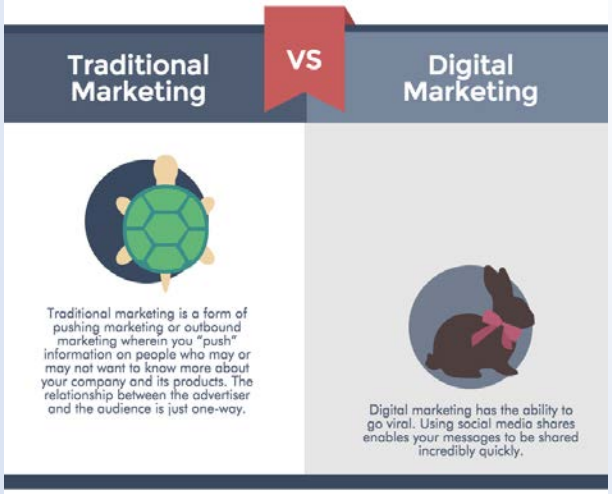

HOW TO
MAKE MONEY
the startup way
by Anna Vital
find a product (or idea) that is popular but not yet perfect
buy one, and study it in detail
figure out how to improve it
make a prototype
show the prototype to 100 people
10%
50%
give her 10% of your company
find a person with a lot of money, an investor
split with your co-founder 50% (use vesting)
find a co-founder who can build it with you
remake it, until people start pre-ordering it, (ex. Kickstarter)
make the product
sell your product to 1 Million people
get more money
list your company on stock exchange like NASDAQ
your investor, your co-founder, and you all make money when you sell shares there
Funders and Founders

5. Process

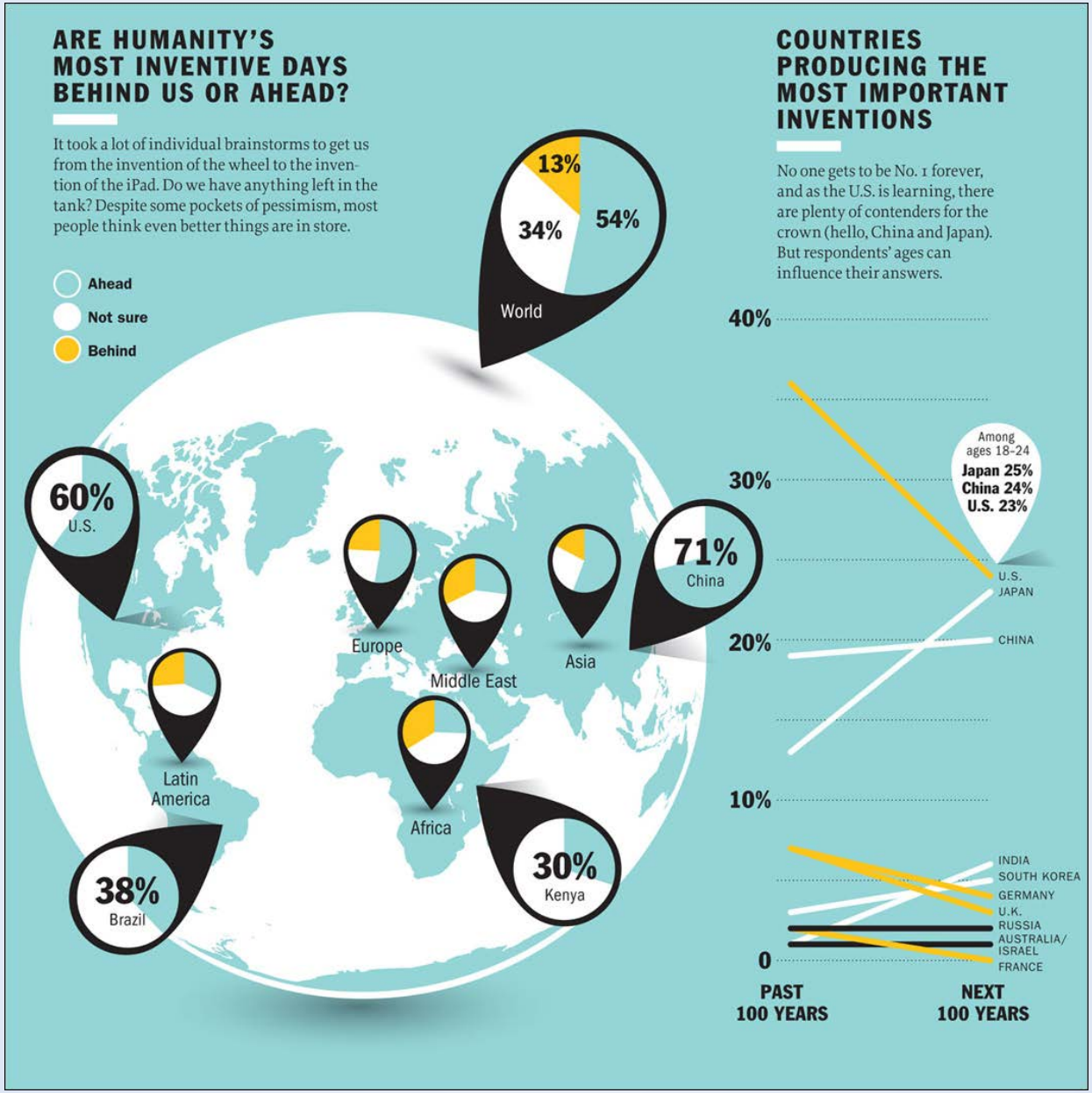
Perigon
9 Ways to measure a Business Process
Business Enterprise Mapping
1
Process Effectiveness
Process performance to specified customer requirements
2
Process Efficiency
Inputs and resources consumed by process versus standards
3
Supplier Effectiveness
Supplier performance to specified process' requirements
4
Units in Process
Unit quantities of Inputs and Outputs between supplier and customer
5
Product Cost
Total cost to produce & deliver outputs,including inputs, processing, and resource costs
6
Resource Productivity
Units produced by the process versus resources consumed by the process, including facility, equipment, people, and info tech.
7
Process Cycle Time
Time required from inputs supply to outputs delivery.
8
Process Alignment
The level of match-up between customer demand, process outputs, and supplier inputs.
9
Process Compliance
Extent to which process adheres to third party standards, such as maturity, ISO, industry, federal, SOX.
Supplier
Inputs
Process
Outputs
Customer
©2016 Business Enterprise Mapping, LLC
www.businessmapping.com

6. Comparison



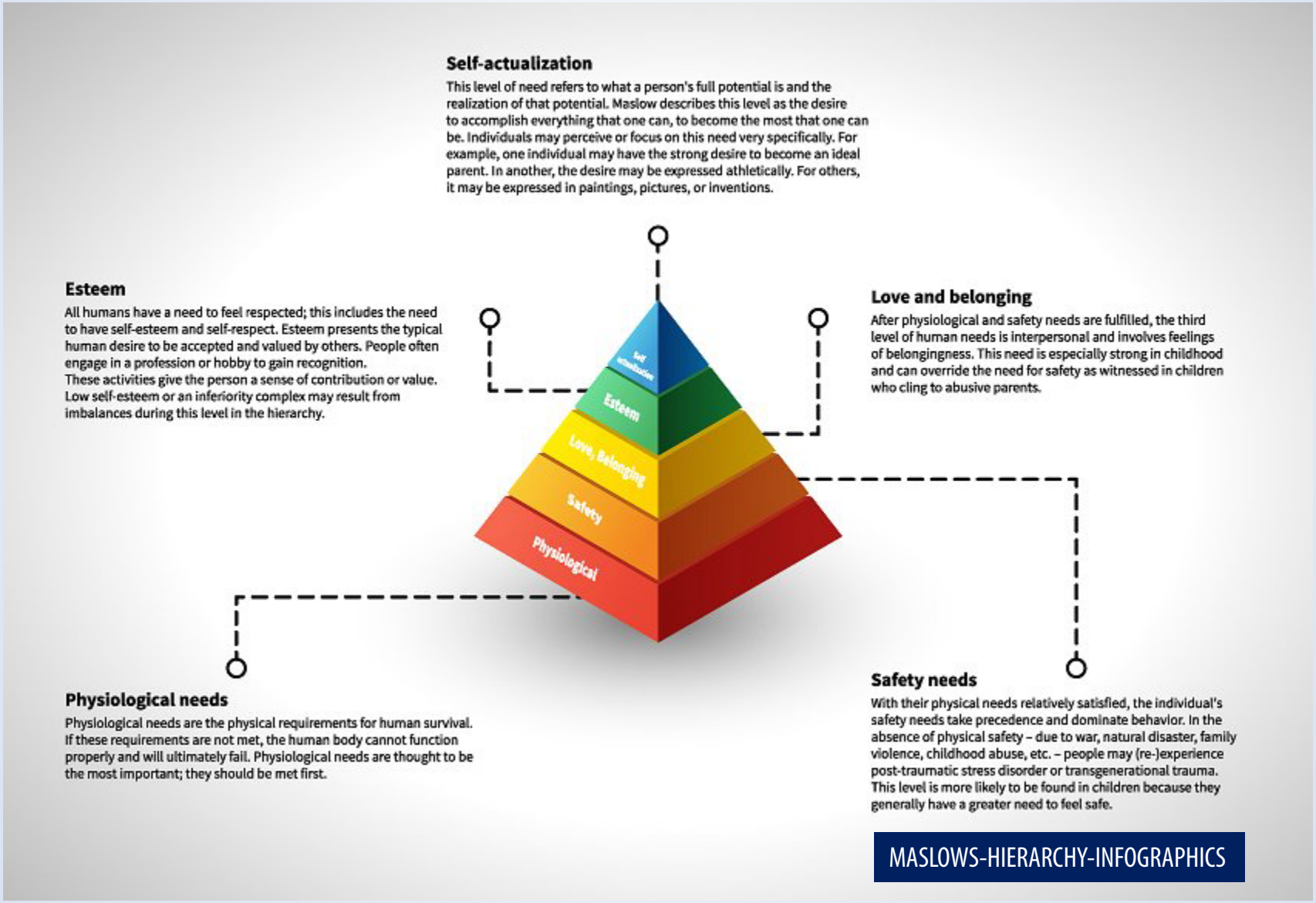


7. Location

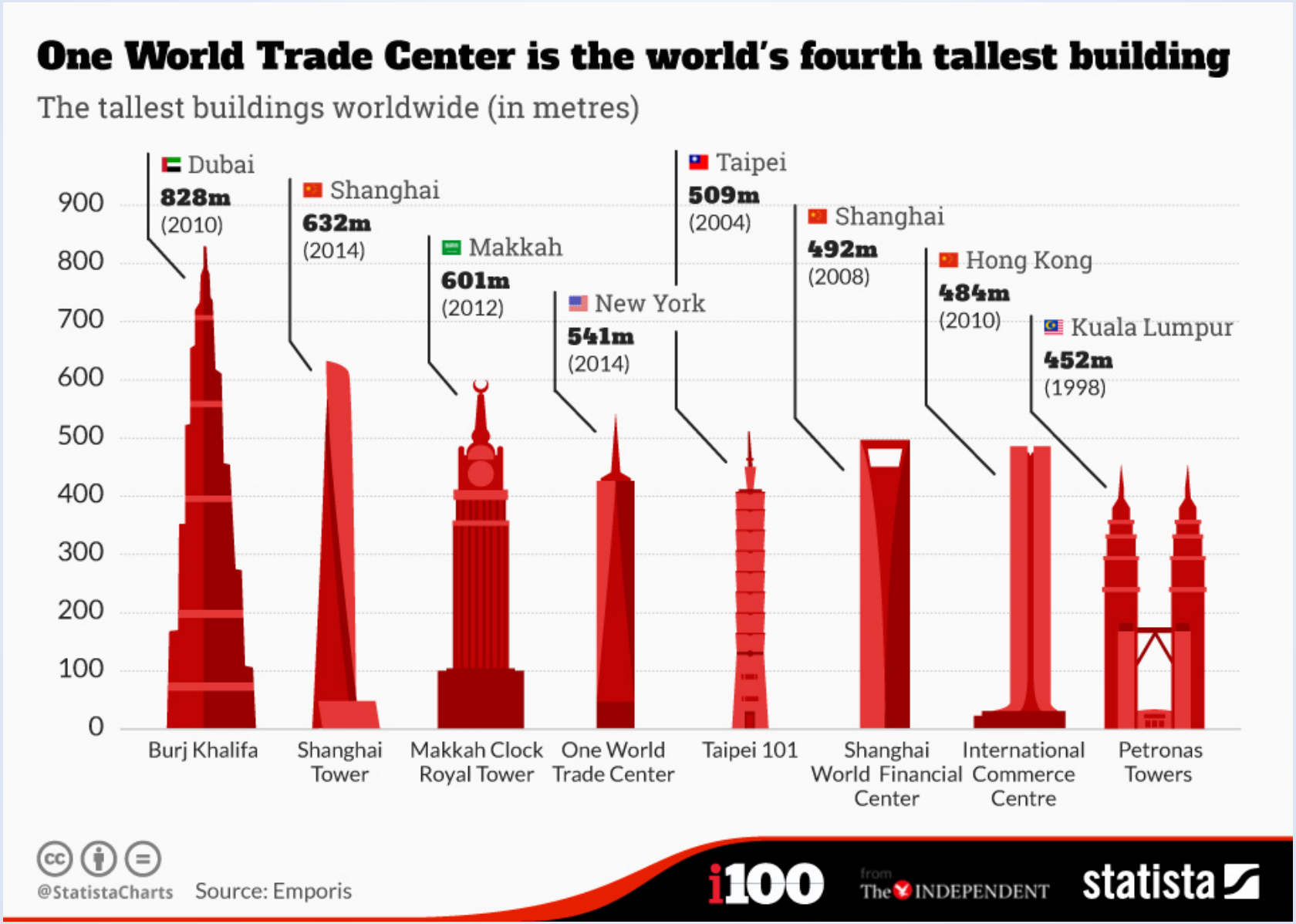

ARE HUMANITY'S MOST INVENTIVE DAYS BEHIND US OR AHEAD?
It took a lot of individual brainstorms to get us from the invention of the wheel to the invention of the iPad. Do we have anything left in the tank? Despite some pockets of pessimism, most people think even better things are in store.
Ahead
Not sure
Behind
13%
34%
54%
World
60%
U.S.
71%
China
Europe
Middle East
Asia
Latin America
Africa
38%
Brazil
30%
Kenya
COUNTRIES PRODUCING THE MOST IMPORTANT INVENTIONS
No one gets to be No. 1 forever, and as the U.S. is learning, there are plenty of contenders for the crown (hello, China and Japan). But respondents' ages can influence their answers.
40%
30%
20%
10%
0
Among ages 18–24
Japan 25%
China 24%
U.S. 23%
U.S.
JAPAN
CHINA
INDIA
SOUTH KOREA
GERMANY
U.K.
RUSSIA
AUSTRALIA/ ISRAEL
FRANCE
PAST 100 YEARS
NEXT 100 YEARS

8. Photo-graphic

9. Hierarchical

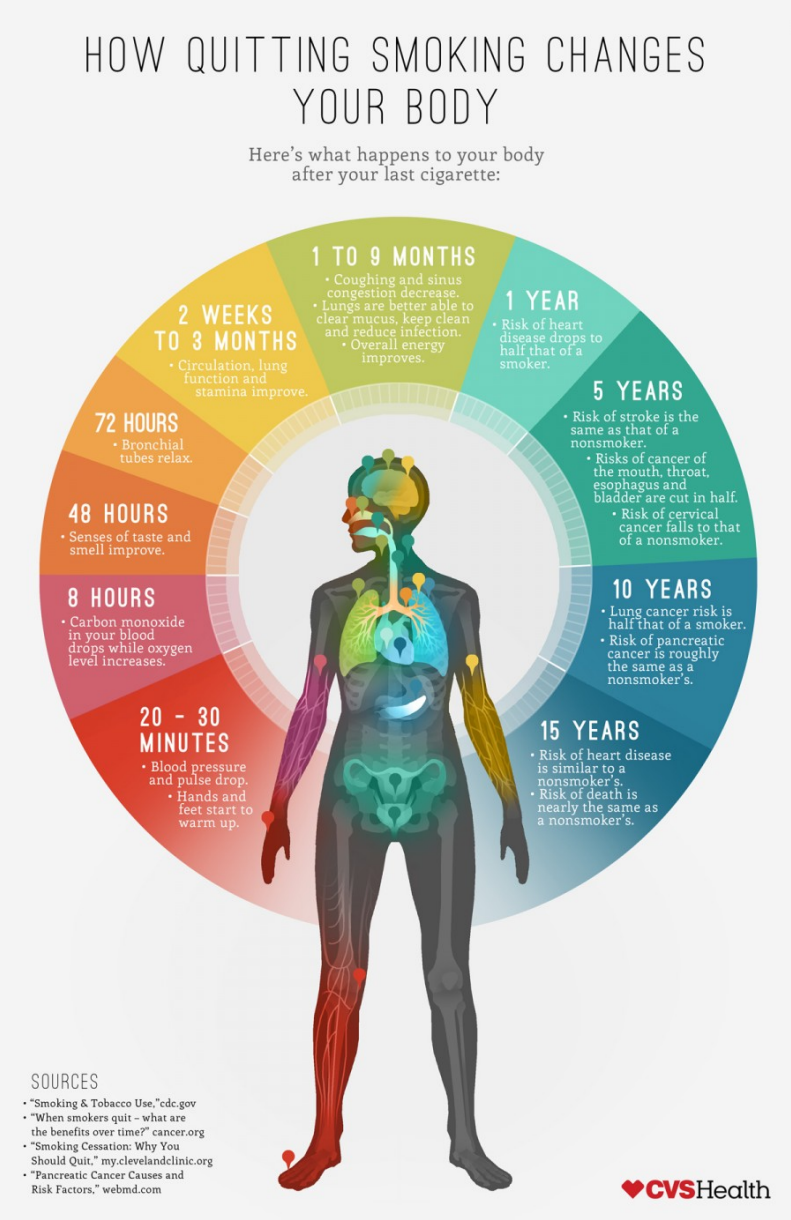


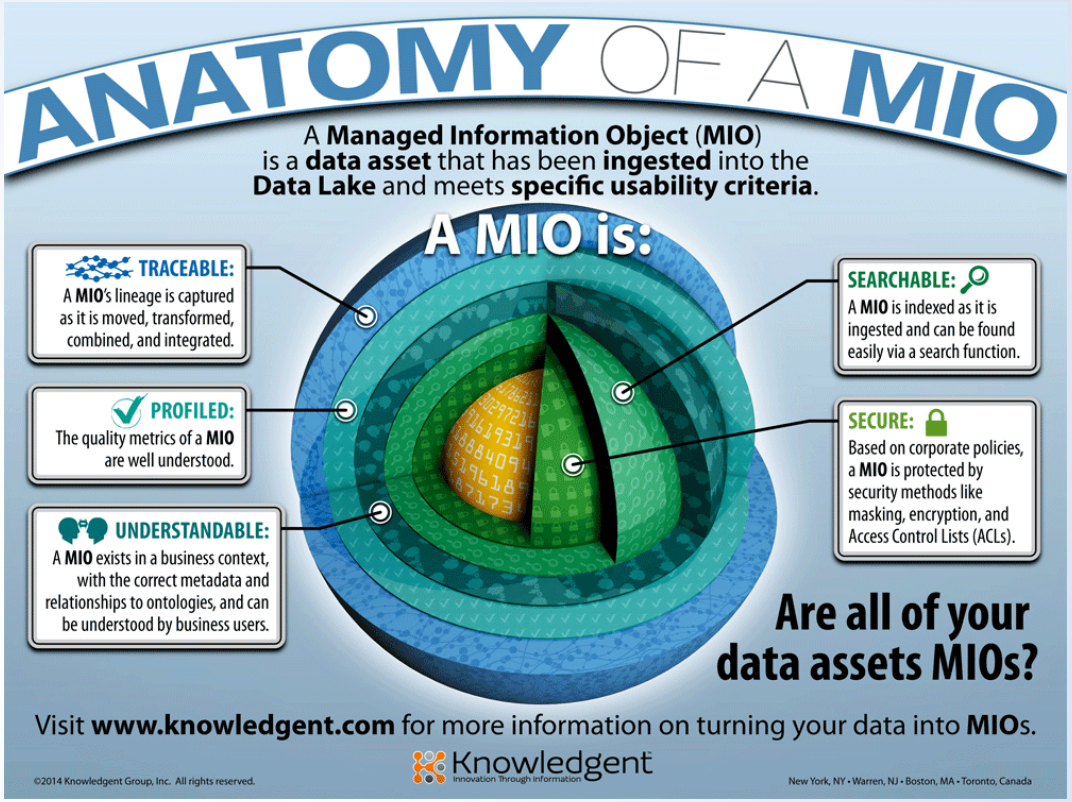
10. Single chart



11. Visualized Numbers

12. Anatomical





13. Visual Resume

Graphic Designer

CRAIGHT CARTER

ABOUT

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Ut neque magna, pulvinar sed nibh eget, fringilla interdum nulla. Integer sed purus faucibus, ultrices ante sit amet, rhoncus justo. Sed ex libero, ornare vestibulum suscipit non, semper id sem. Mauris eget facilisis lorem.

EDUCATION

UNIVERSITY OF SAN DIEGO
2002 - 2007
Major in Graphic Design

UNIVERSITY OF TORONTO
2002 - 2007
Minor in Media Studies

CONTACT

San Diego, CA

555-2534-1111

ccarter@email.com

SKILLS

PHOTOSHOP | ILLUSTRATOR | FILM

AREAS OF EXPERTISE

- Poster design
- Branding/Identity
- Product packaging
- User interface
- Editing video
- Illustrations

WORK EXPERIENCE

2010 — PRESENT

Now Design Startup
Junior Designer
Lorem ipsum dolor sit amet, consectetur adipiscing elit. Ut neque magna, pulvinar sed nibh eget, fringilla interdum nulla. Integer sed purus faucibus, ultrices ante.

2006 — 2010

Pixel Inc.
Social Media Curator
Lorem ipsum dolor sit amet, consectetur adipiscing elit. Ut neque magna, pulvinar sed nibh eget, fringilla interdum nulla. Integer sed purus faucibus, ultrices ante.

MAX ROMEO

Digital Marketing & Advertising Specialist

max@mail.com | 555.555.5555 | 55 Franklin St., Bristow, VA 20136

EXPERIENCE

Managing Director
Twist Once Inc. 2015-2016
Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam. ipsum dolor sit amet, consectetur adipiscing.

Creative Content Specialist
Twist Twice Inc. 2014-2015
Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam. ipsum dolor sit amet, consectetur adipiscing.

EDUCATION

Masters of Digital Media
Ryerson University, Toronto. 2015-2016

Bachelor of Business Management
Ryerson University, Toronto. 2011-2015

SKILLS

- Communication
- Teamwork
- Learning
- Drive
- Flexibility
- Adaptability
- Leadership
- Adobe Suite

REFERENCES

Nesta Jetta
CEO and Co Founder at Twist Once Inc.
555.555.5555
nesta@mail.com

Joe James
Manager at React
555.555.5555
joe@mail.com

HOW TO MAKE INFOGRAPHICS

2

DEFINE YOUR TARGET
AUDIENCE

DEFINE YOUR
GOALS

DEFINE THE
MEDIUM

CHOOSE YOUR
TOPIC

FIND THE RIGHT
INFORMATION

FIND THE STORY
IN THE DATA

CHOOSE THE TYPE OF
INFOGRAPHIC

CREATE A
WIREFRAME

THE ONE BIG
IDEA

DESIGN

Your Own Infographic

Understand what to create

An infographic is not an accumulation of data. It is a representation of information in a graphic format designed to make the data easily understandable at a glance.

The chosen colors

These are the steps

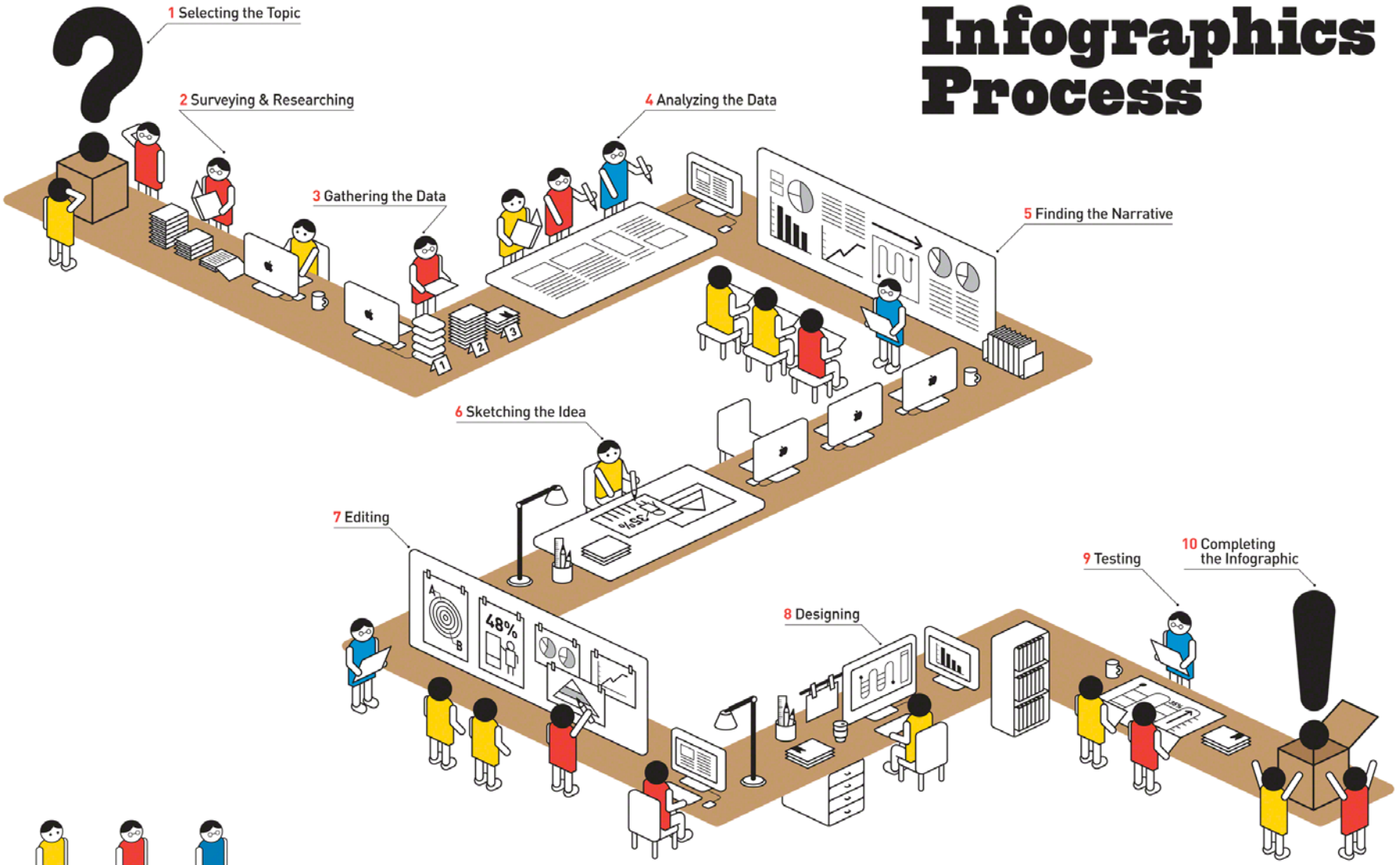
#1 Context
#2 Structure
#3 Story
#4 Design

Congratulations !

Now that your infographic is done, be sure to mention the name of the designer and the source if necessary. Easily share your infographic via social media or embed it on your website to increase traction.

Source : https://en.wikipedia.org/wiki/Infographic

Infographics Process

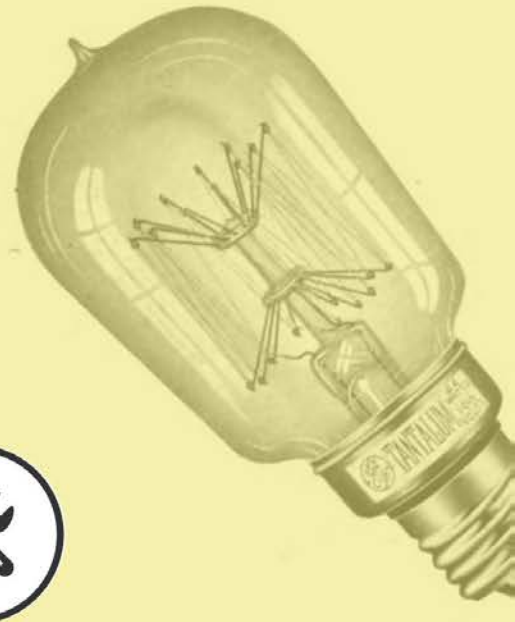


Infographics Lab 203 http://infographicslab203.com

INTERESTING
DATA OR INFORMATION

3

1. SOLVE A BURNING PROBLEM



Find a problem your audience faces and create an infographic that tells them how to solve that problem.

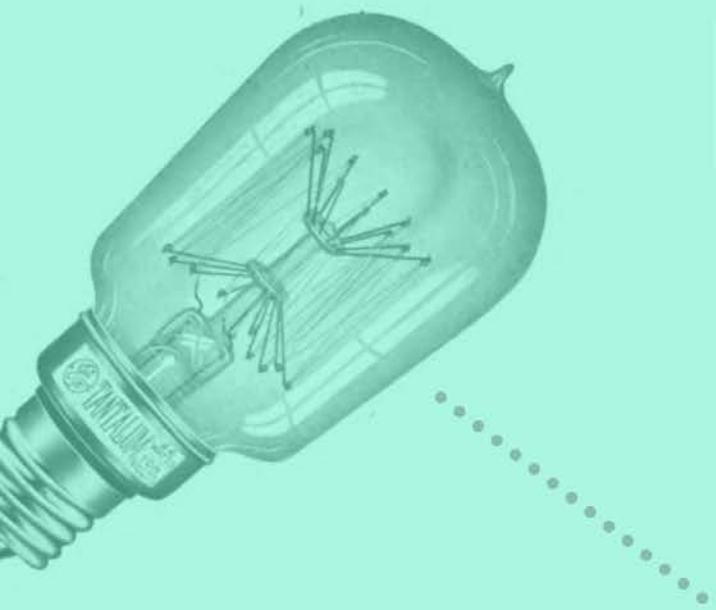
There are two ways to do this:

a. Ask your audience.

Email, call, or survey your audience to find common problems they face.

b. Solve your own problem.

If there's a problem you keep running into, chances are other people are as well.



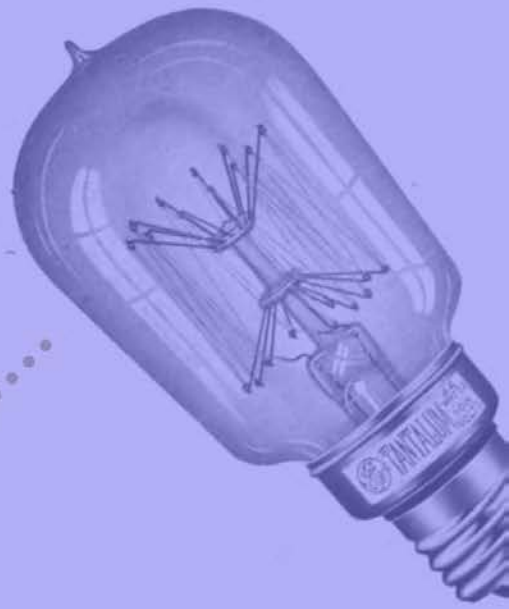
2. CHALLENGE THE STATUS QUO

Think of things that are a give-in in your job, field or industry. Then challenge those beliefs:

- **Make your audience rethink conventional wisdom**
- **Challenge your audience's beliefs and behaviors**

3. CHANGE THE PERSPECTIVE

There is always a traditional way of framing a narrative. You can make it more interesting by changing or reframing the perspective.

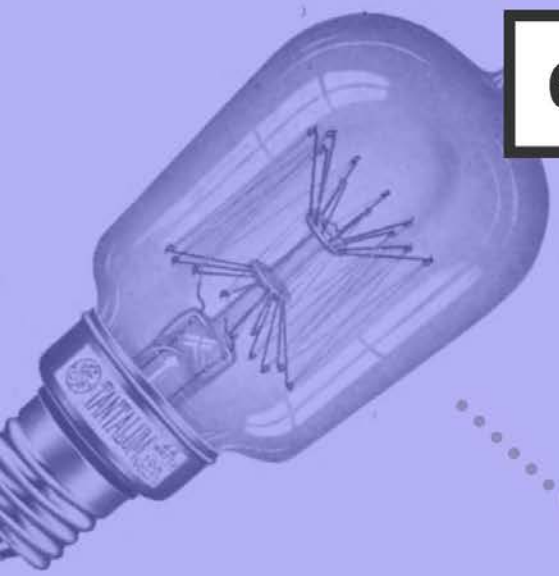


4. FIND ORIGIN STORIES

The origin stories of a field of interest, industry, company or influential person often make for a great infographic.

5. FIND EXTREME CASES

In statistics, outliers are often removed because their influence on the rest of the data might skew the analysis. But these outliers are often interesting topics for an infographic.

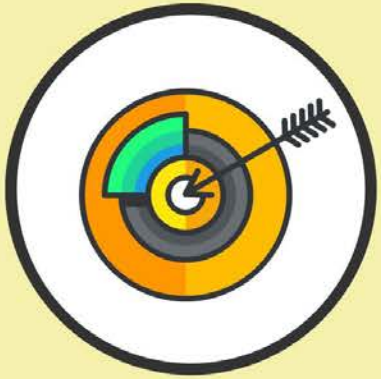


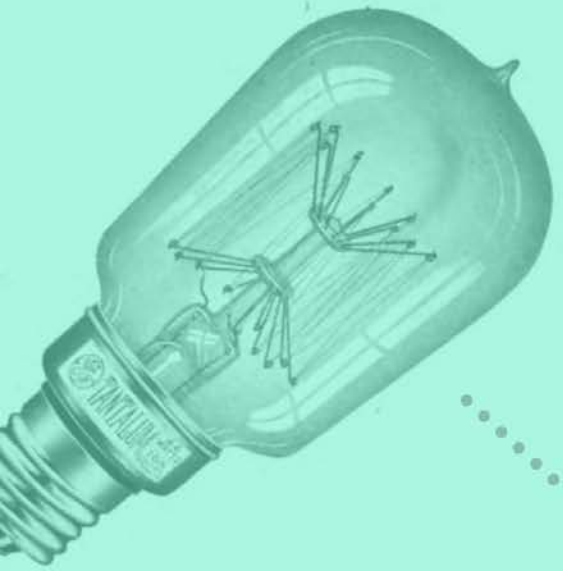
6. GO OUTSIDE YOUR IMMEDIATE FIELD

Look for a topic in a related field that you are not directly a part of. There may be questions that your audience is asking about a related field that you can answer.

7. FIND NICHES AND SUBCULTURES

Finding a niche audience is a strategy that businesses use when they are trying to enter a new market. The same approach can be applied to infographics and content marketing.





8. MASHUP TWO OR MORE TOPICS

This is as straightforward as it sounds: take two seemingly unrelated topics and mash them up. The resulting topic is usually something with a fresh perspective.

VISUALLY
APPEALING STORY

4

Structure your infographic.

Every infographic can follow a structure that looks something like this:

Introduction

Sum up what your infographic is about.

Section subheadings

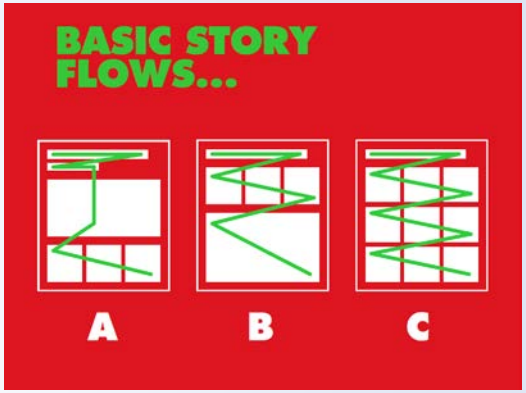
Identify different topics within the infographic, and draw the reader from one topic to the next.

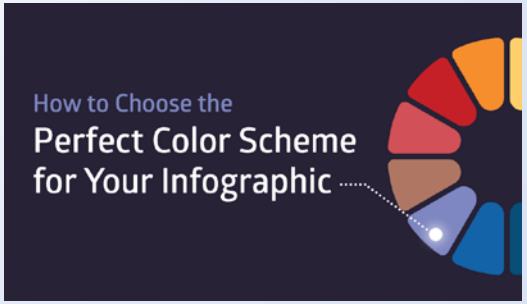
Chart and graph labels

They'll only consist of a few words.

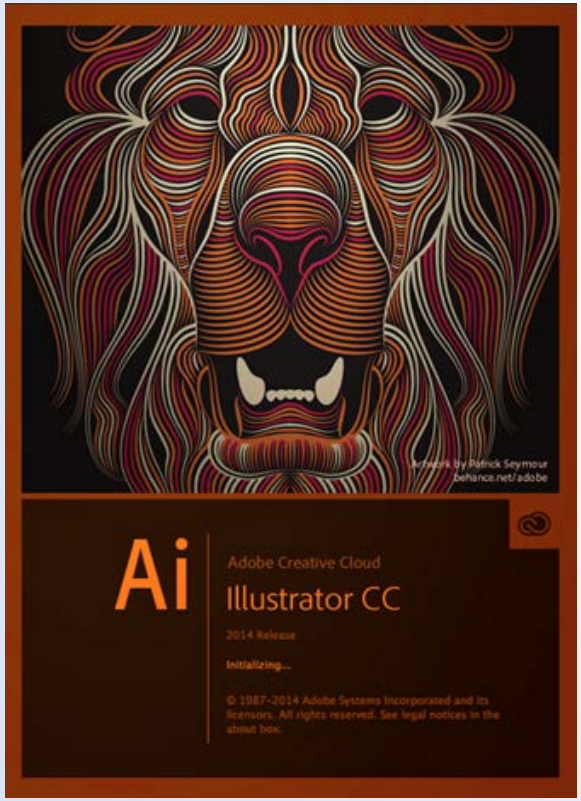
Sources and footnotes

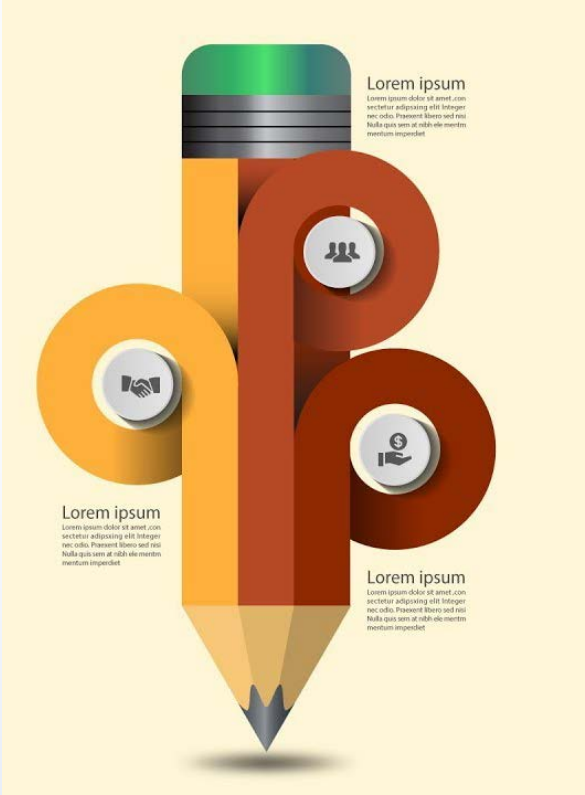
If you use other sources, it's advisable to source them.



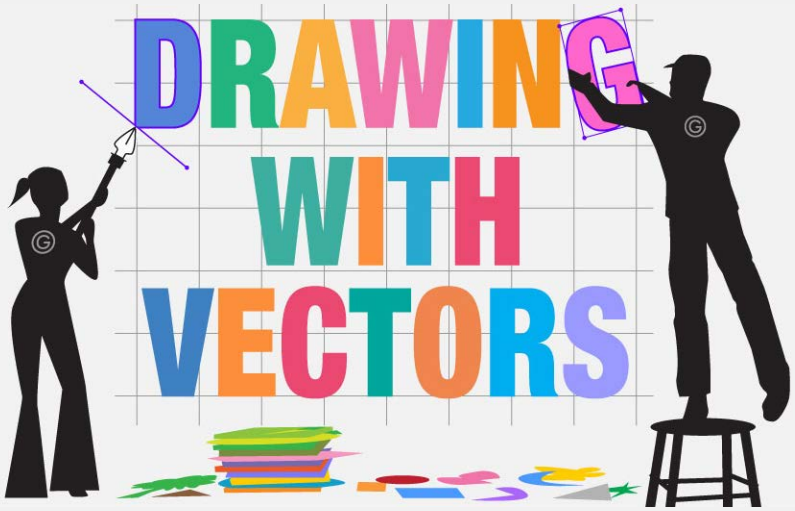


USE VECTOR
NOT BITMAP





Adobe Illustrator is powerful vector graphics software *used to create* stunning graphics, *infographics*, packaging, exhibition design, pop-up banners, illustrations, logos, patterns and textile designs and more. It is an essential tool for graphic designers, textile designers, illustrators, architects and more.



Ai

When to use ILLUSTRATOR

YES	NO
Logos Logotype	Image Editing
Vector Illustrations	Pixels Graphics/ Effects
Web Graphics	Books Newsletters Reports
Motion Graphics	Video/ Audio
Business Cards/ Stationary	Animation

Ps

When to use PHOTOSHOP

YES	NO
Image Editing Color Correction	Logo Design
Photo Compositing & Retouching	Print Publishing
Special Effects & Filters	Vector Illustrations
Web & Motion Graphics	Books, Brochures Newsletters
Software/ Web/Mobile/ UI Design	Text & Vector Graphics

DRAWING WITH VECTOR	PAINTING WITH PIXEL
Mathematical calculations that form shapes	Pixel-based
Vector programs best for creating logos, drawings and illustrations, technical drawings. For images that will be applied to physical products.	Raster programs best for editing photos and creating continuous tone images with soft color blends
It is not the best format for continuous tone images with blends of color or to edit photographs	
Can be scaled to any size without losing quality	Do not scale up optimally - Image must be created/scanned at the desired usage size or larger
Resolution-independent: Can be printed at any size/resolution	Large dimensions & detailed images equal large file size
A large dimension vector graphic maintains a small file size	
Number of colors can be easily increased or reduced to adjust printing budget	It is more difficult to print raster images using a limited amount of spot colors
Vector art can be used for many processes and easily rasterized to be used for all processes	Some processes cannot use raster formats
Can be easily converted to raster	Depending on the complexity of the image, conversion to vector may be time consuming
Common vector graphic file format: ai, cdr, svg, and eps & pdfs originating from vector programs	Raster images are the most common image format, including: jpg, gif, png, tif, bmp, psd, eps and pdfs originating from raster programs
Common vector programs: drawing programs such as Illustrator, CorelDraw, Inkscape (free)	Common raster programs: photo editing / paint programs such as Photoshop & Paint Shop, GIMP (free)

EASY TO UNDERSTAND DESIGN

5

THE ELEMENTS OF DESIGN

LINE

A line is a mark between two points. There are various types of lines, from straight to squiggly to curved and more. Lines can be used for a wide range of purposes: stressing a word or phrase, connecting content to one another, creating patterns and much more.

SHAPE

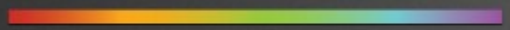
Height + width = shape. We all learned basic shapes in grade school - triangles, squares, circles and rectangles. Odd or lesser seen shapes can be used to attract attention.

There are three basic types of shape: **geometric** (triangles, squares, circles etc), **natural** (leaves, animals, trees, people), and **abstracted** (icons, stylizations, graphic representations etc).

VALUE

Value is how light or how dark an area looks. A gradient, shown above, is a great way to visualize value - everything from dark to white, all the shades in-between, has a value. Use value to create depth and light; to create a pattern; to lead the eye; or to emphasize.

COLOR



Color is used to generate emotions, define importance, create visual interest and more. **CMYK** (cyan/magenta/yellow/black) is **subtractive**; RGB (red/green/blue) is **additive**.

Some colors are **warm** and **active** (orange, red); some are **cool** and **passive** (blue, purple).

There are various **color types** (primary to analogous) and **relationships** (monochromatic to triad) worth learning more about as well.

ELEMENTS OF DESIGN

quick reference sheet

SPACE

Space is the area around or between elements in a design. It can be used to separate or group information. Use it effectively to: give the eye a rest; define importance; lead the eye through a design and more.

TEXTURE

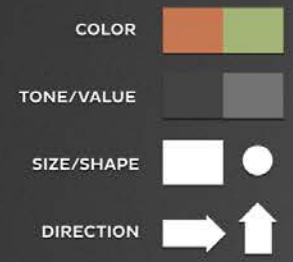
Texture relates the to surface of an object; the look or feel of it. Concrete has a rough texture; drywall has a smooth and subtle texture. Using texture in design is a great way to add depth and visual interest. Printed material has actual, textile texture while screen material has implied texture.

SIZE

Size is how small or large something is: a small shirt vs. an extra large shirt, for example. Use size to define importance, create visual interest in a design (via contrasting sizes), attract attention and more.

paper leaf
created by Paper Leaf Design. www.paper-leaf.com

CONTRAST



Unique elements in a design should stand apart from one another. One way to do this is to use contrast. Good contrast in a design – which can be achieved using elements like color, tone, size, and more – allows the viewer's eye to flow naturally.

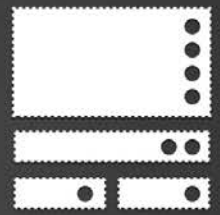
To the left, you can see 4 ways to create contrast in your design.

REPETITION

Repetition breeds cohesiveness in a design. Once a design pattern has been established – for example, a dotted border or a specific typographic styling – repeat this pattern to establish consistency.

The short version?

Establish a style for each element in a design and use it on similar elements.

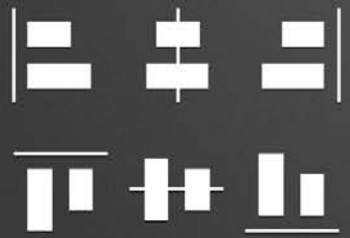


PRINCIPLES of DESIGN

quick reference poster

ALIGNMENT

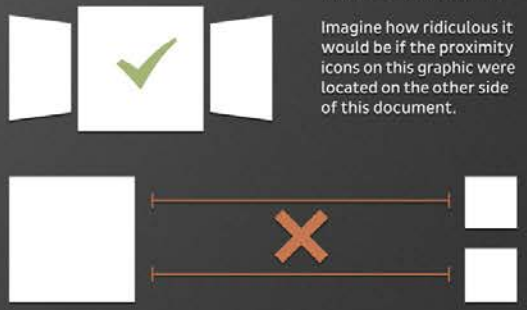
Proper alignment in a design means that every element in it is visually connected to another element. Alignment allows for cohesiveness; nothing feels out of place or disconnected when alignment has been handled well.



PROXIMITY

Proximity allows for visual unity in a design. If two elements are related to each other, they should be placed in close proximity to one another. Doing so minimizes visual clutter, emphasizes organization, and increases viewer comprehension.

Imagine how ridiculous it would be if the proximity icons on this graphic were located on the other side of this document.



a handy paper leaf resource

THE DO'S & DON'TS OF INFOGRAPHICS MAKING

6

TYPOGRAPHY

All fonts should be legible and appropriate for what you are communicating.

WRONG

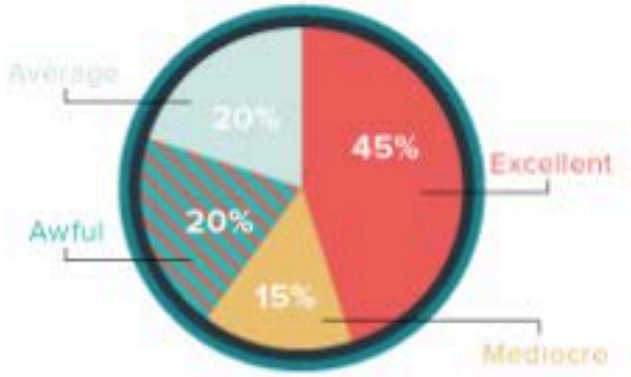
RIGHT

SOCIAL
CUSTOMER SERVICE

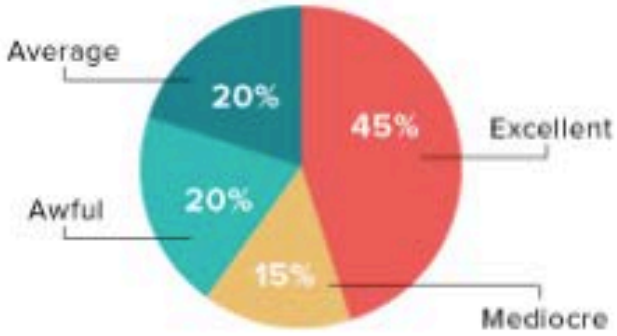
COLOR

Use no more than five colors in a single layout. You can use different shades of a single color to distinguish

WRONG



RIGHT



ICONOGRAPHY

Icons should be simple, easy to understand and universal.
They're meant to enhance comprehension, never distract.

WRONG

RIGHT

CALLOUTS

Use callouts sparingly to highlight only key information.

NEGATIVE SPACE

Keep significant negative space. When too much information is in a layout, messaging becomes cluttered and incoherent.

LAYOUT

Present content in a way that guides readers through in a logical hierarchy. Aligning the elements in a layout with each other will help maintain consistency.

COMPARISON

Visualize data in a way that is easy for the viewer to compare values.

WRONG

What do Facebook users want from brands?

RIGHT

What do Facebook users want from brands?

ACCURACY

Visualizations should represent their values proportionately.
Inaccurate representations can deceive viewers.

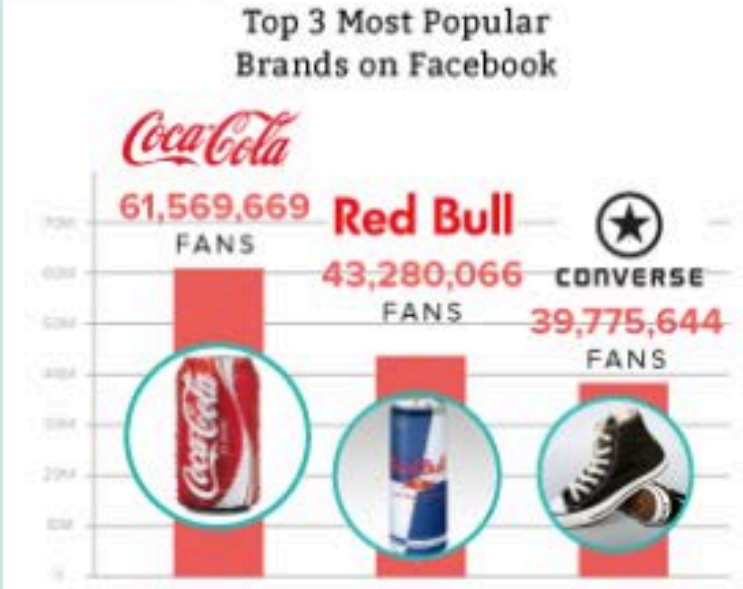
WRONG

RIGHT

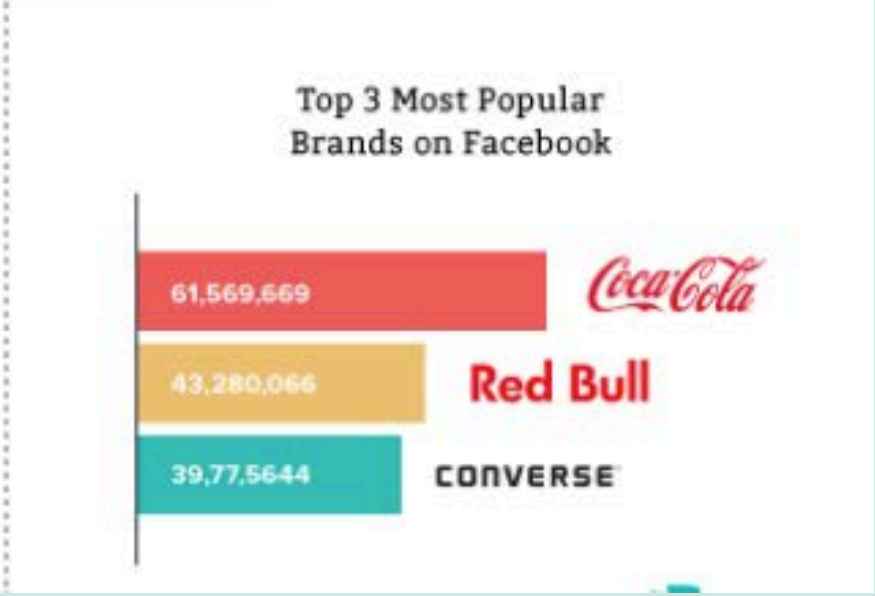
SIMPLICITY

Avoid unneccessary design, including 3D charts, ornamental illustration or extraneous elements.

WRONG



RIGHT



THE DO'S & DON'TS OF CHART MAKING

7

THE DO'S AND DON'TS OF CHART MAKING

DO

- Use appropriate charts, including horizontal bar graphs
- Use the full axis
- Keep it simple, especially with animations, and make sure with a squint test
- Use color to contrast and highlight data
- Ask others for opinions

DON'T

- Change chart styles partway through a comparison
- Overload charts with unimportant data, more than six colors, or too many animations
- Use a pie chart, especially one with more than seven wedges
- Use combinations with similar colors (red/orange and green, blues and greens)
- Sacrifice important data

FOUR TYPES OF DATA

NOMINAL: Data sorted into categories

ORDINAL: Arbitrary numerical scale

DISCRETE: Represents units

CONTINUOUS: Can be measured on a continuum

TYPES OF CHARTS

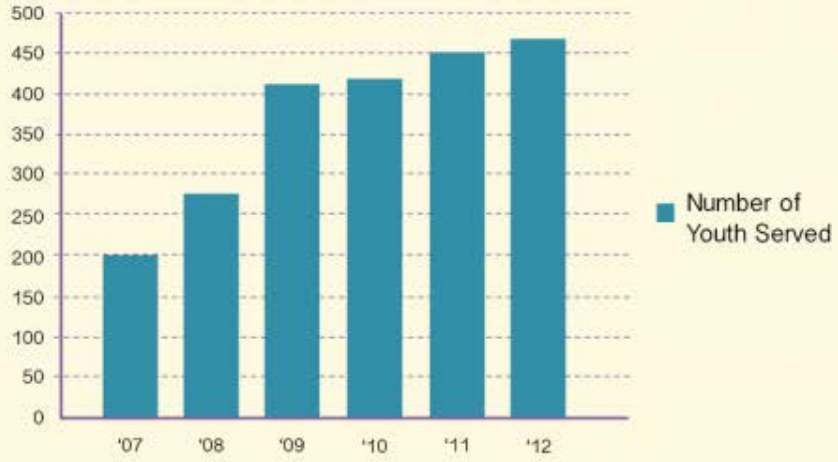
→ Bar chart

→ Pie chart, bar chart

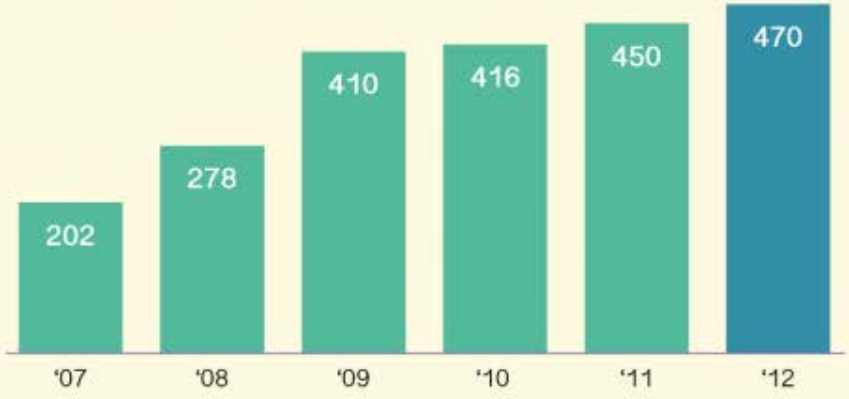
→ Arrays, Pie chart, Bar chart

→ Line chart

Number of Youth Served by Year

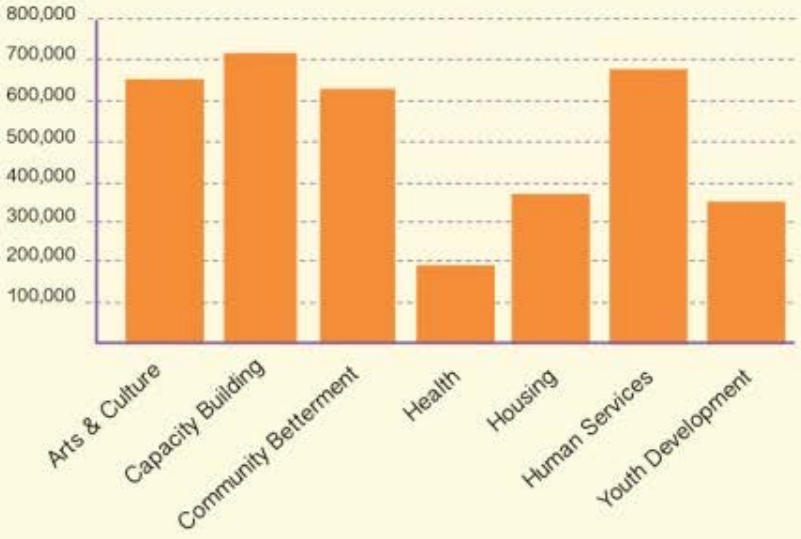


Number of Youth Served by Year



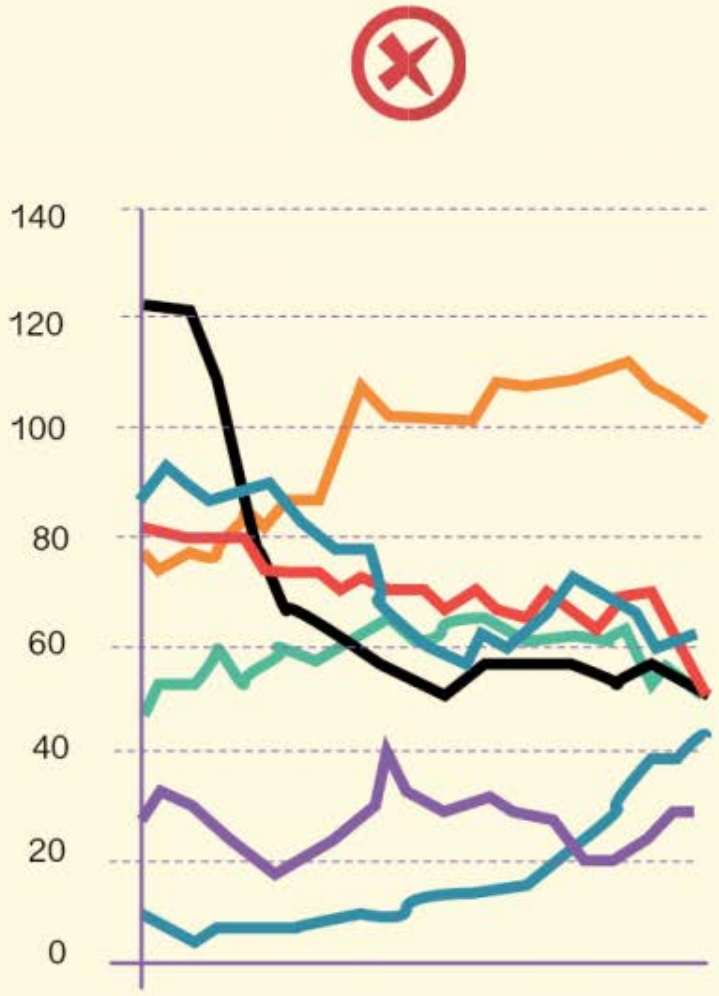
Investment by area of impact

2006-Present



Investment by area of impact

2006-Present / Dollars in '000s


140
120
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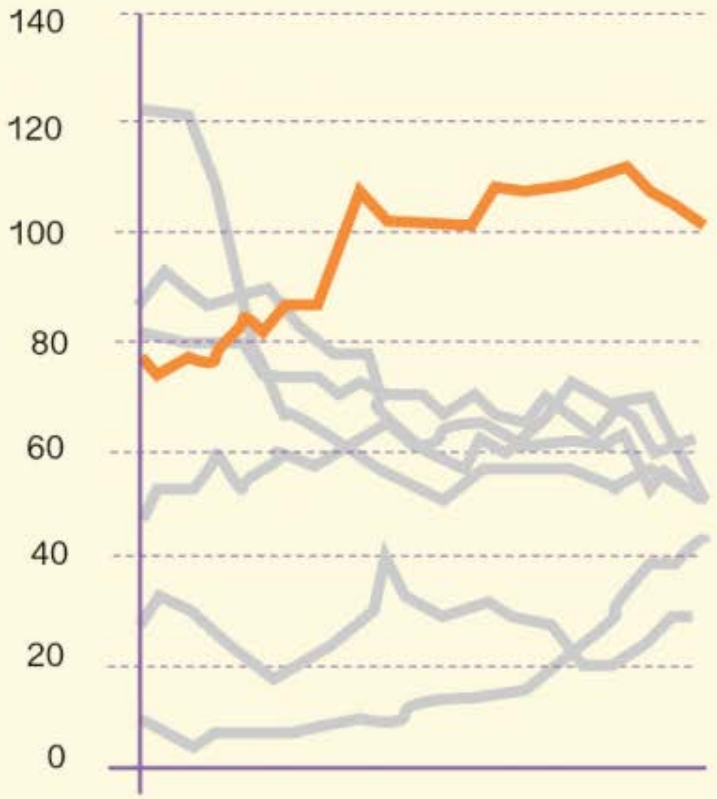
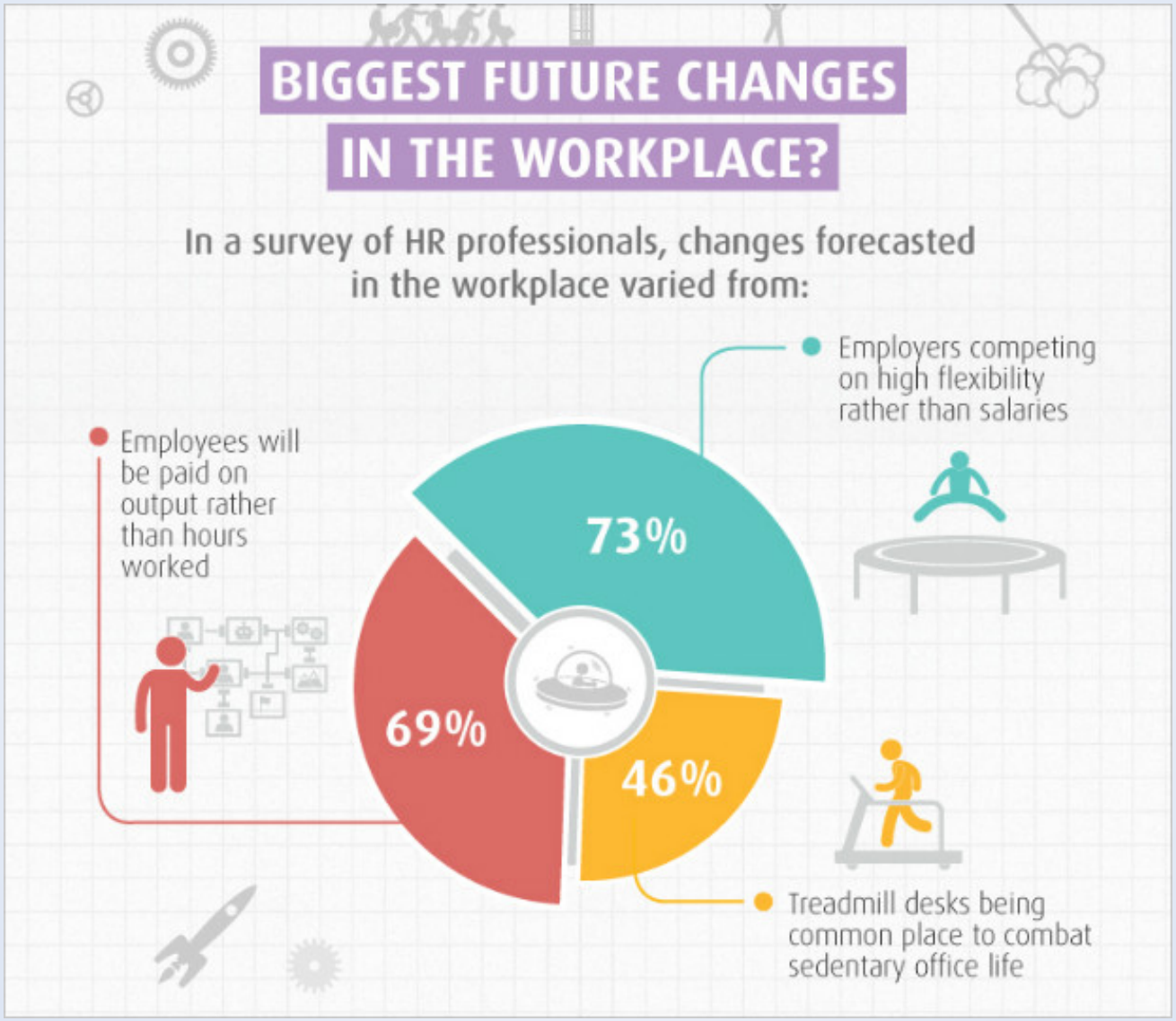
40
20
0


140
120
100
80
60
40
20
0

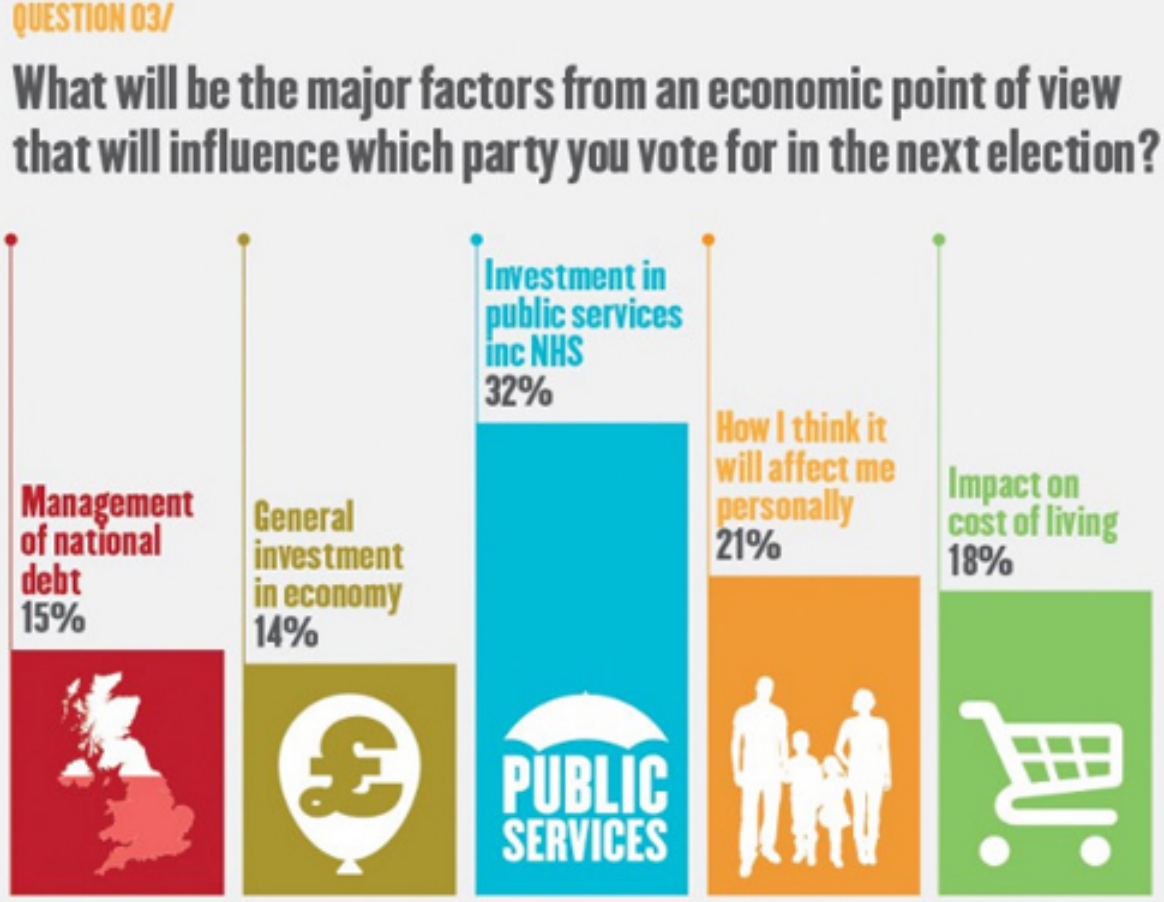
MISTAKES
OF INFOGRAPHICS DESIGN

8

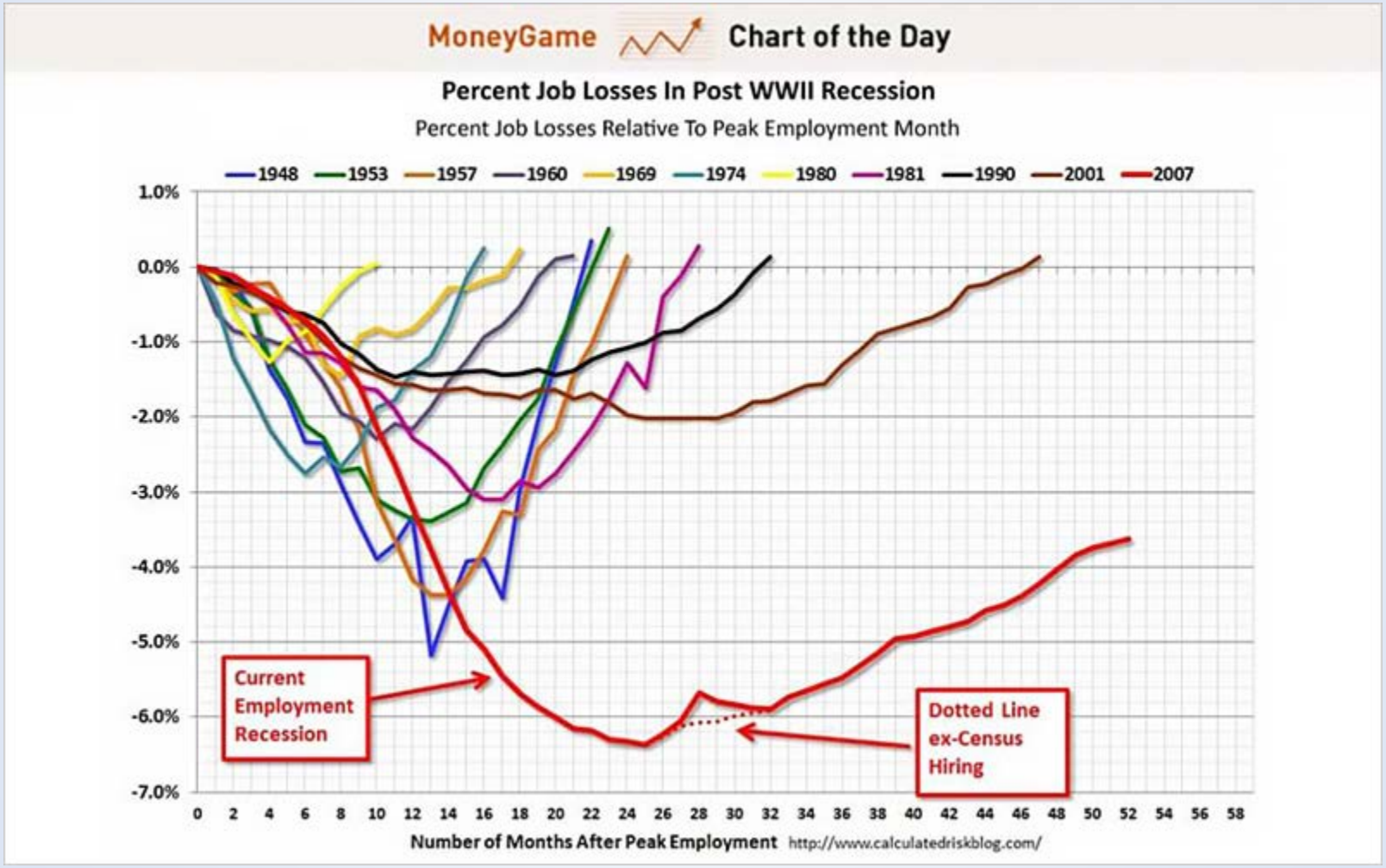
1. It just doesn't add up



2. Choosing the wrong type of chart

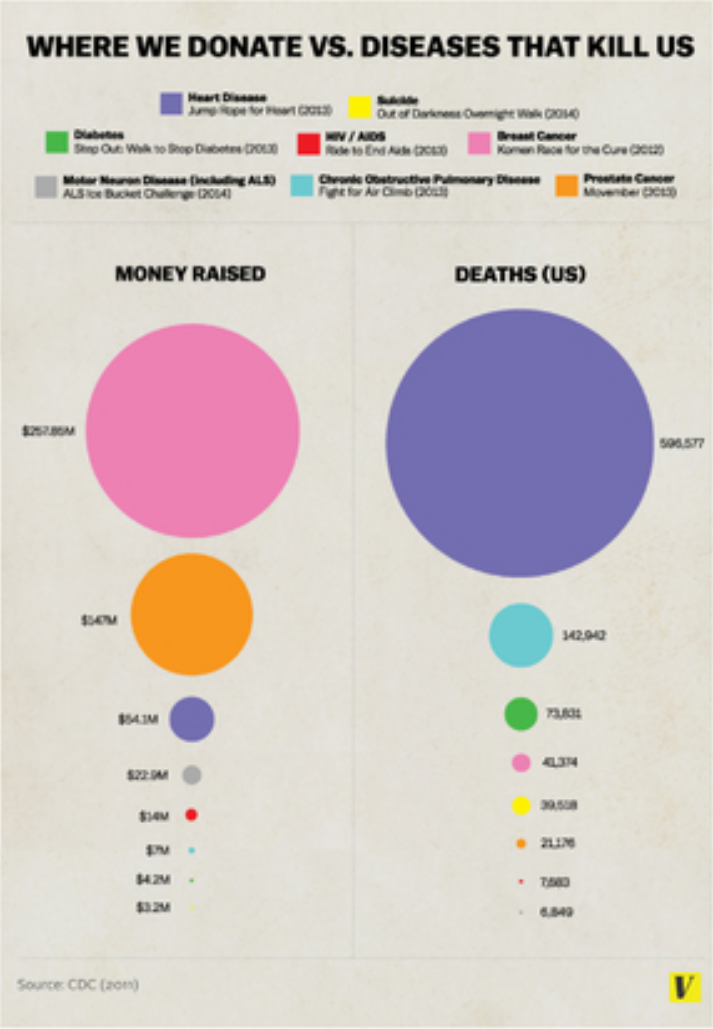


3. Including too much information

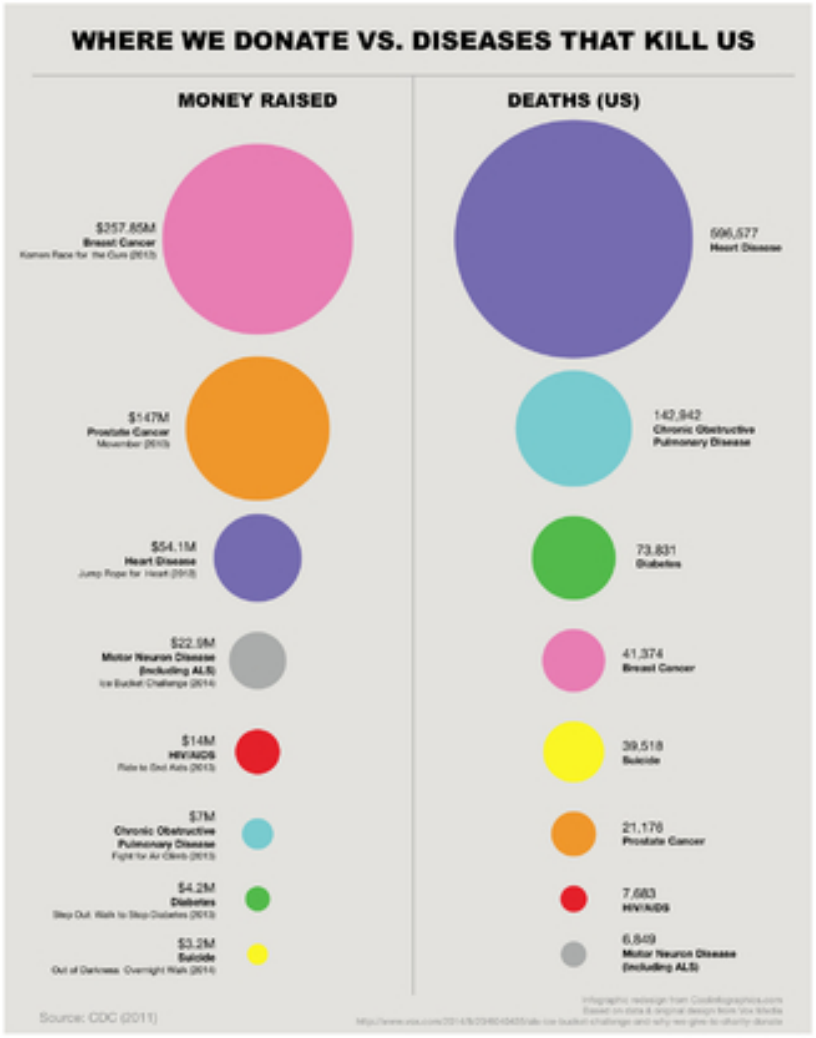


4. Inaccurate scales

Original Design

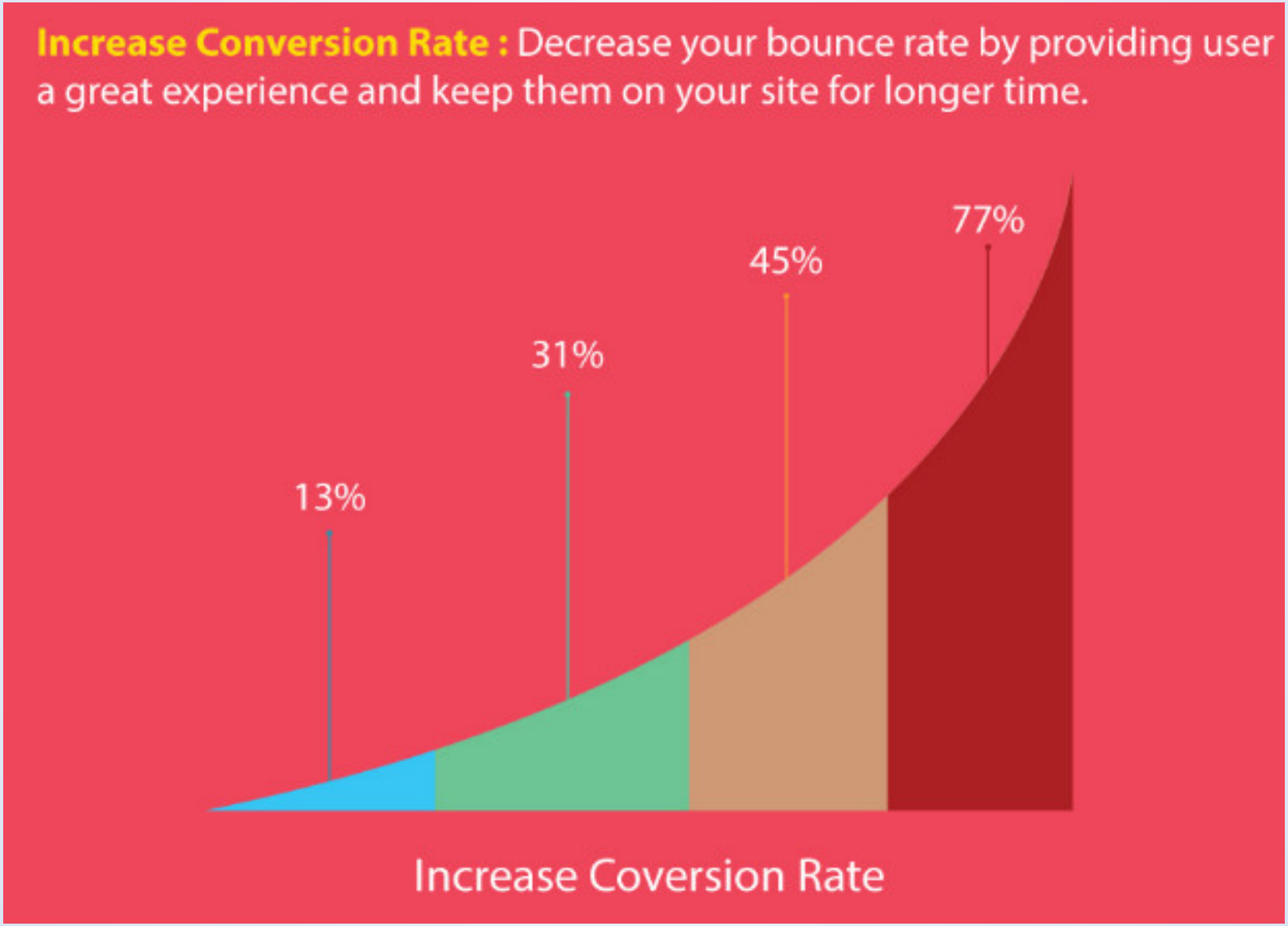


Corrected Design

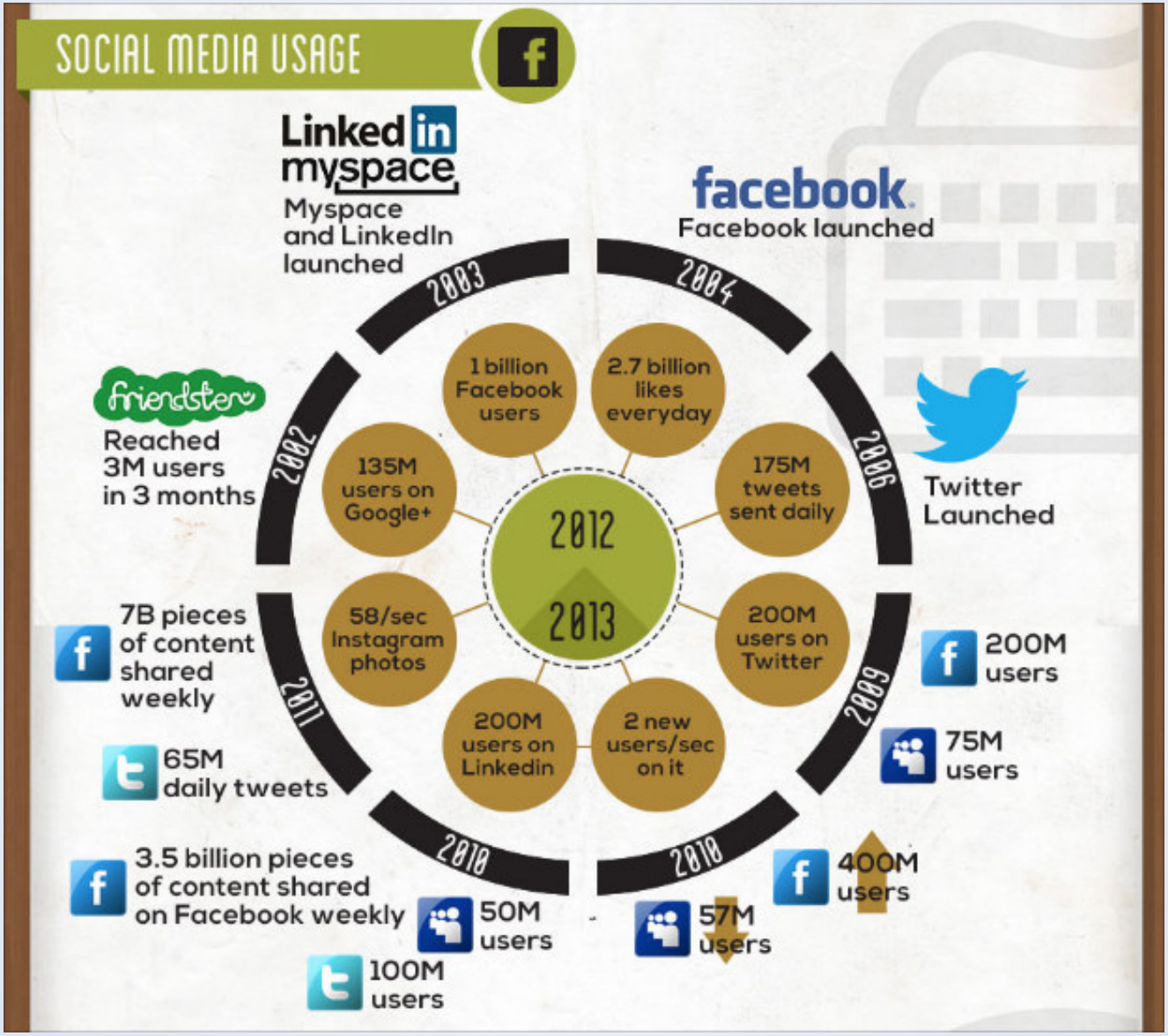


5. Boring and uninformative headlines

6. Wrong placement of axes

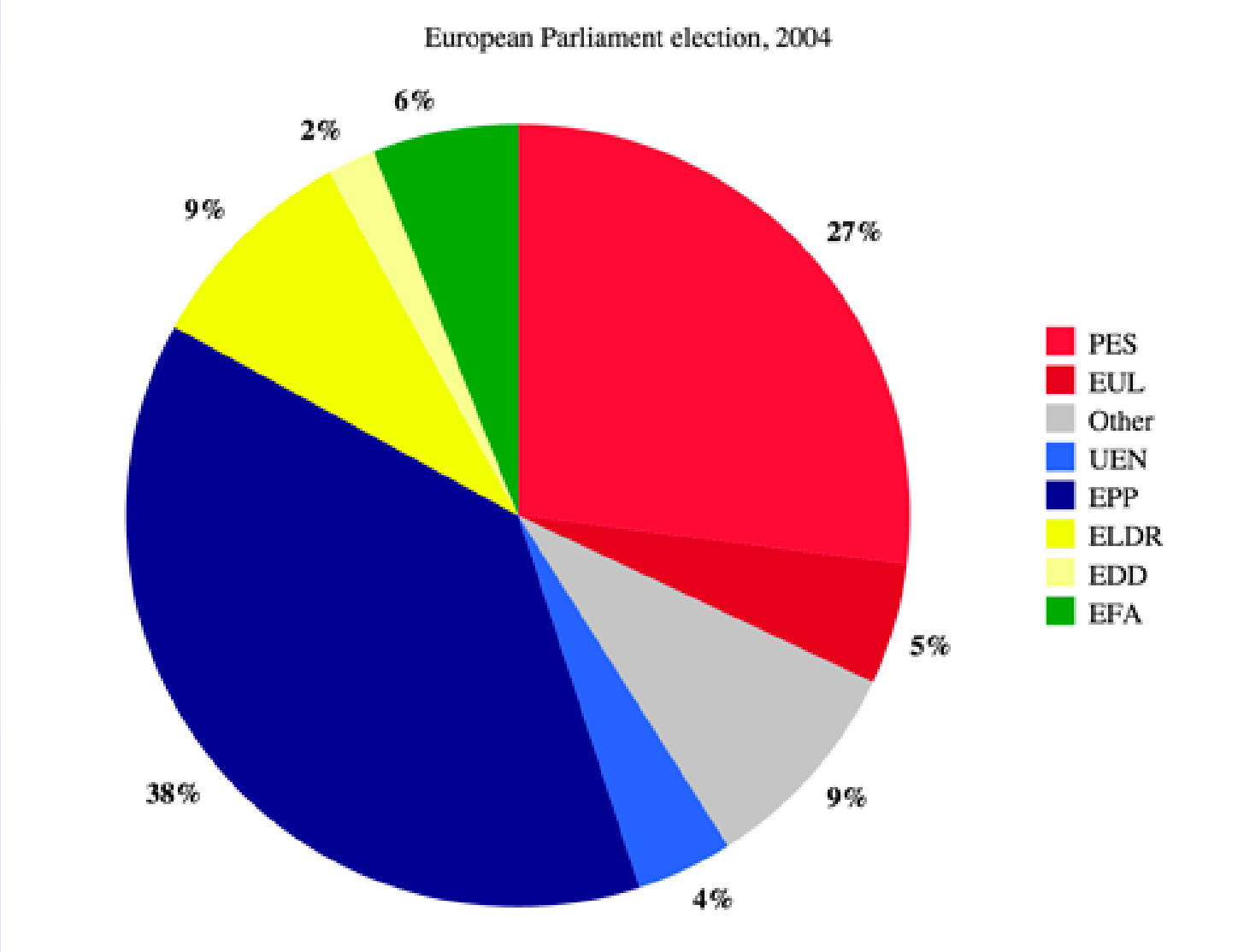


7. Forcing the reader to do more work

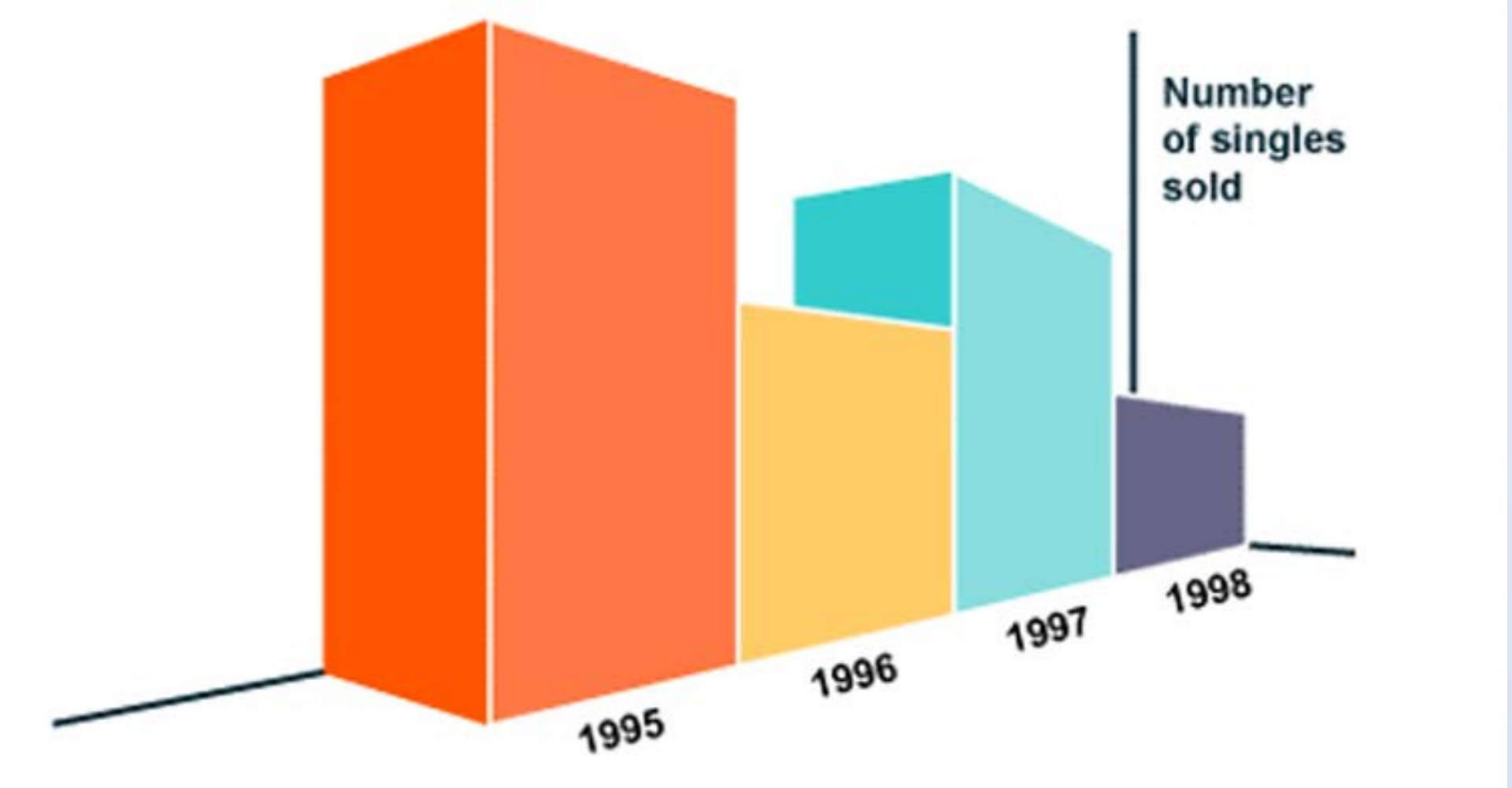


8. Hard-to-understand comparisons

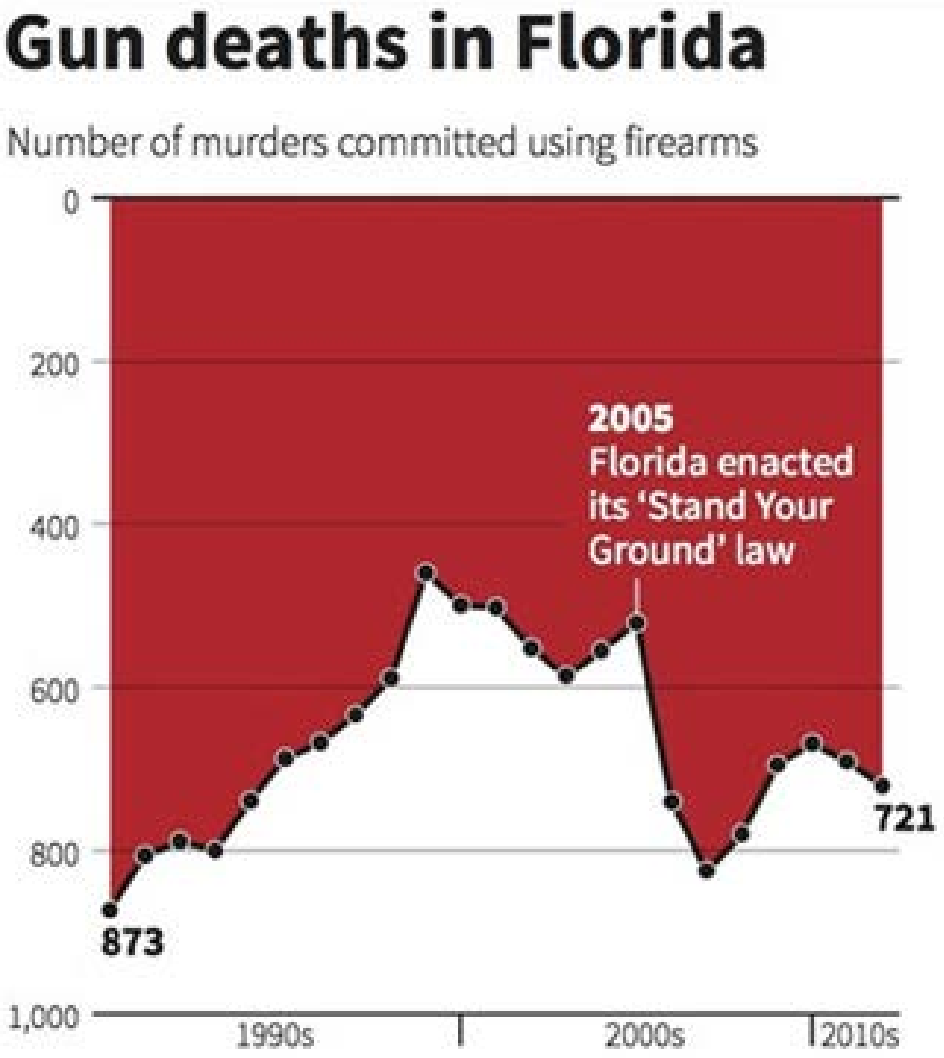
9. Arranging data non-intuitively



10. Misrepresenting data with 3D charts



11. Trying too hard to be different



INTRODUCTION OF INFOGRAPHICS

SOFTWARE MAKER

9

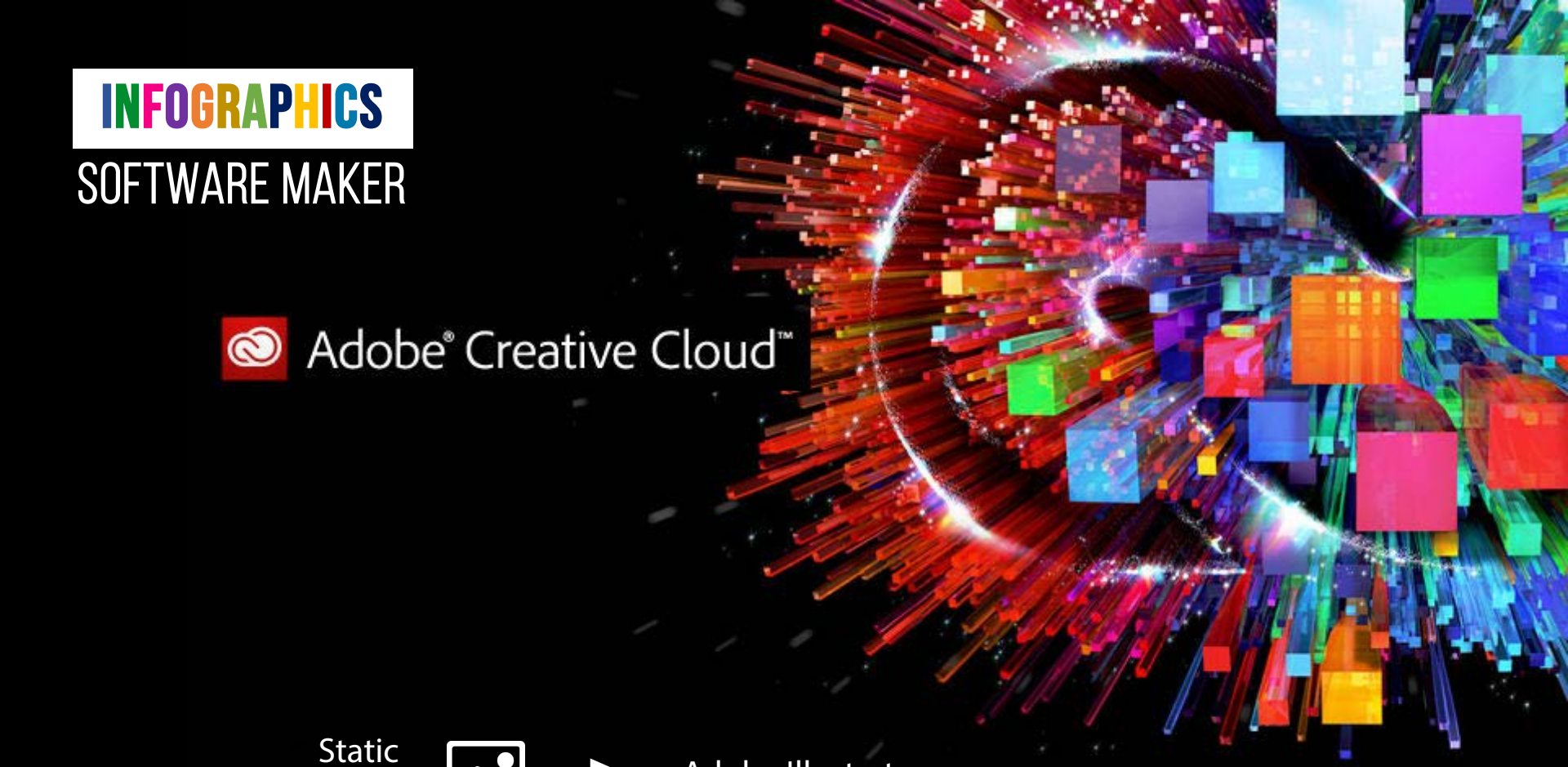
3 FORMATS OF INFOGRAPHICS

STATIC INFOGRAPHICS deftly combine text and images by presenting challenging concepts in the form of graphics, charts, maps, and other visual elements. Since these infographics include still images that don't require user input, these graphic treatments serve as fixed resources.

INTERACTIVE INFOGRAPHICS depend on readers to manipulate them by selecting answers, selecting visual elements, or watching videos. With user input, these type of infographics reveal data, statistics, and other information.

MOTION GRAPHICS are always a captivating communication tool because they are packed with rich stimuli, holding the viewer's attention throughout. The narrative-based nature of motion graphics also allows you to manage the pace and manner of how the information unfolds providing a controlled and powerful environment for explaining complex subject matter. Through a combination of animated graphics, illustration, and kinetic text, the viewer can be walked through an explanation or presentation of ideas, while being entertained. It's a great combination for getting brand-centric messages across and making a connection with the viewer. Motion graphics design is a specialized skill, so creating a motion infographic is more expensive than a comparable static infographic. While printing a motion graphic is not possible, videos can be easily shared.

INFOGRAPHICS
SOFTWARE MAKER



Adobe® Creative Cloud™

Static Infographics	►	Adobe Illustrator
Interactive Infographics	►	Adobe Edge Animate + Adobe Illustrator
Motion Infographics	►	Adobe After Effect + Adobe Illustrator + Adobe Premiere

Thank You

ZULHAN RUDYANSYAH