CRESCENDO SCHOOLS

Network of Schools for Earth System Modelling & Climate Change

Infographics, how to

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Science Communicator
SMHI

Dec 2017
KunskapsGymnasiet

infographics

information + graphics

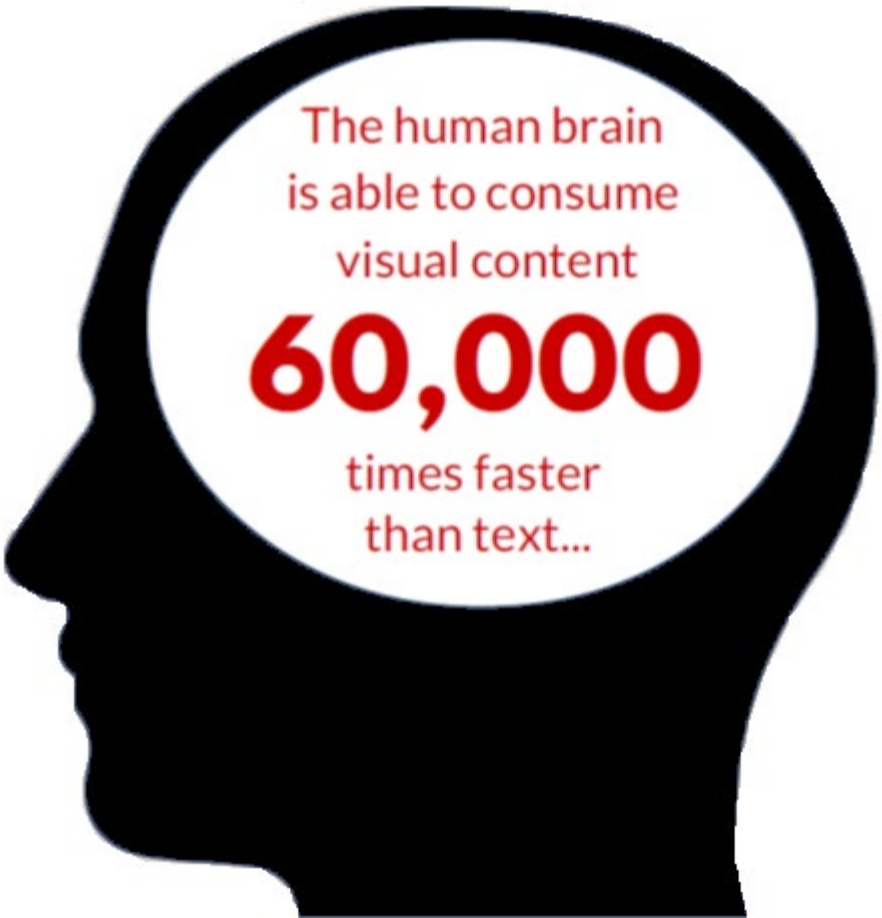
infographics

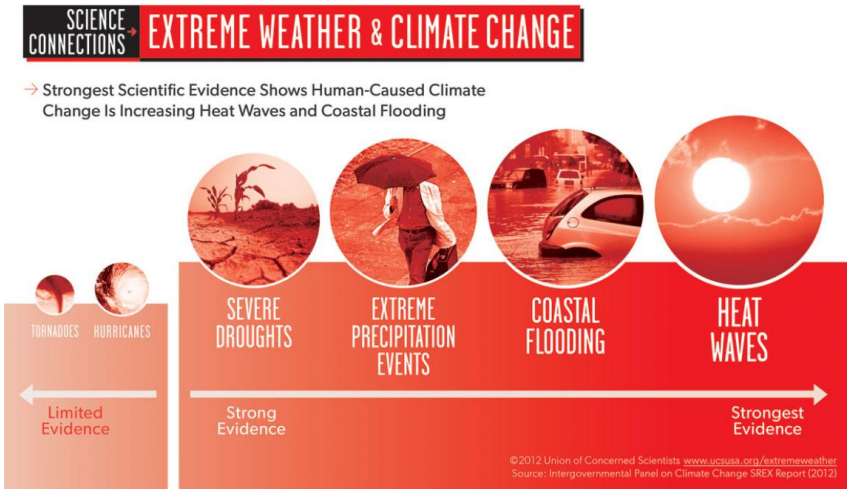
are one of the most popular and shared forms of social content

main objective

make the information
“visible” not only to our eyes
but also to our **brain**.

WHY INFOGRAPHICS?





Content with images get double the views of content without images.

advantages

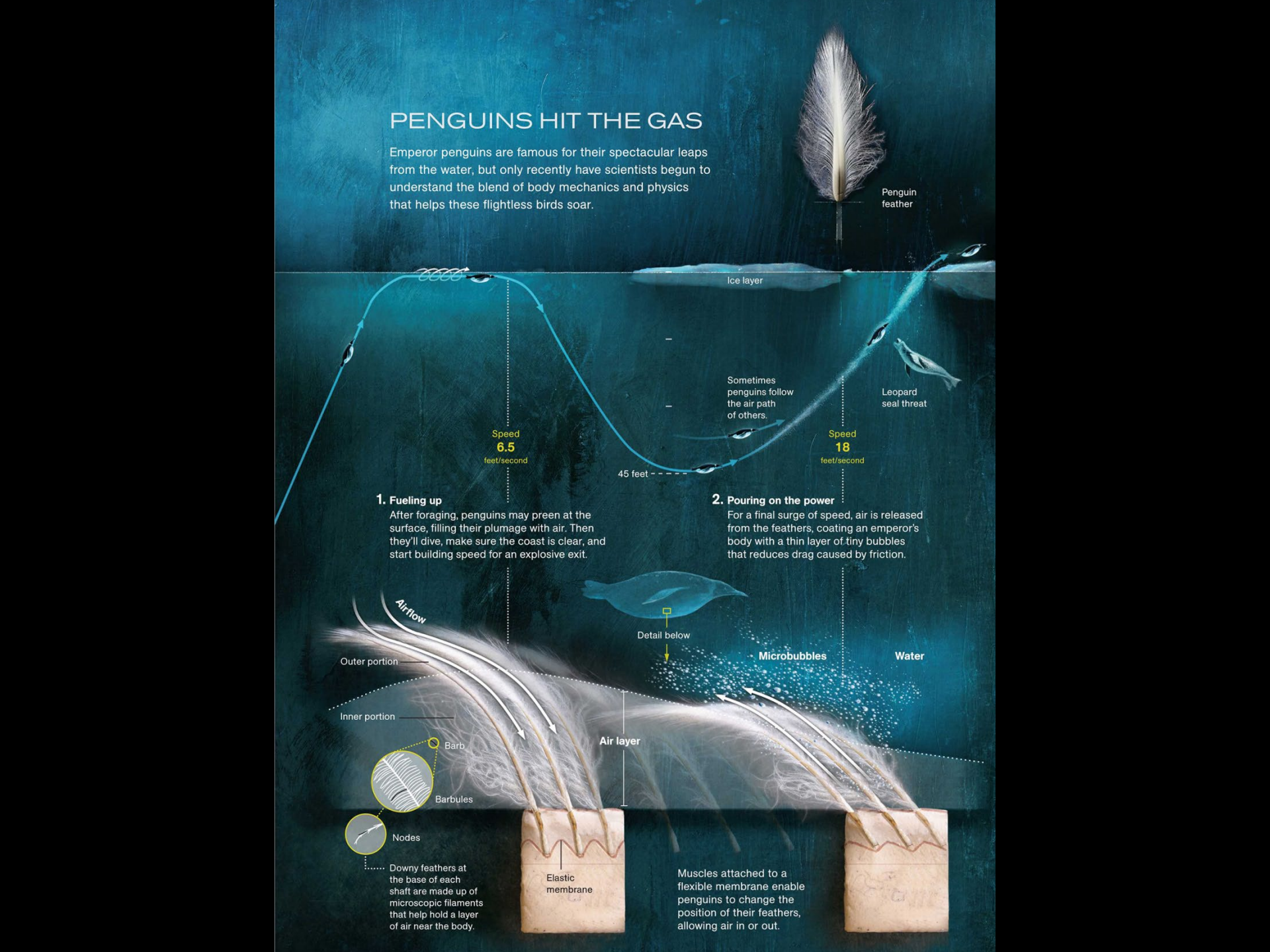
- Captures the reader’s attention
- Improves understanding
- It is memorable

Graphic visualization is not only data visualization…

…is about telling stories.

PENGUINS HIT THE GAS

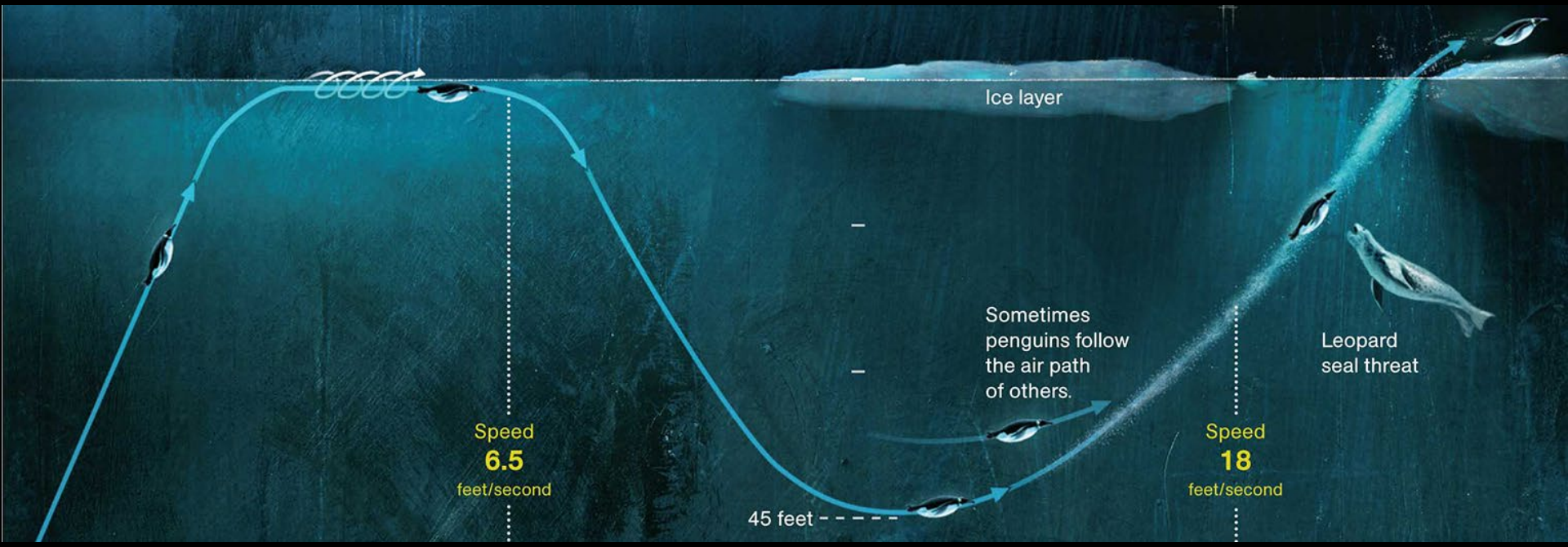
Emperor penguins are famous for their spectacular leaps from the water, but only recently have scientists begun to understand the blend of body mechanics and physics that helps these flightless birds soar.

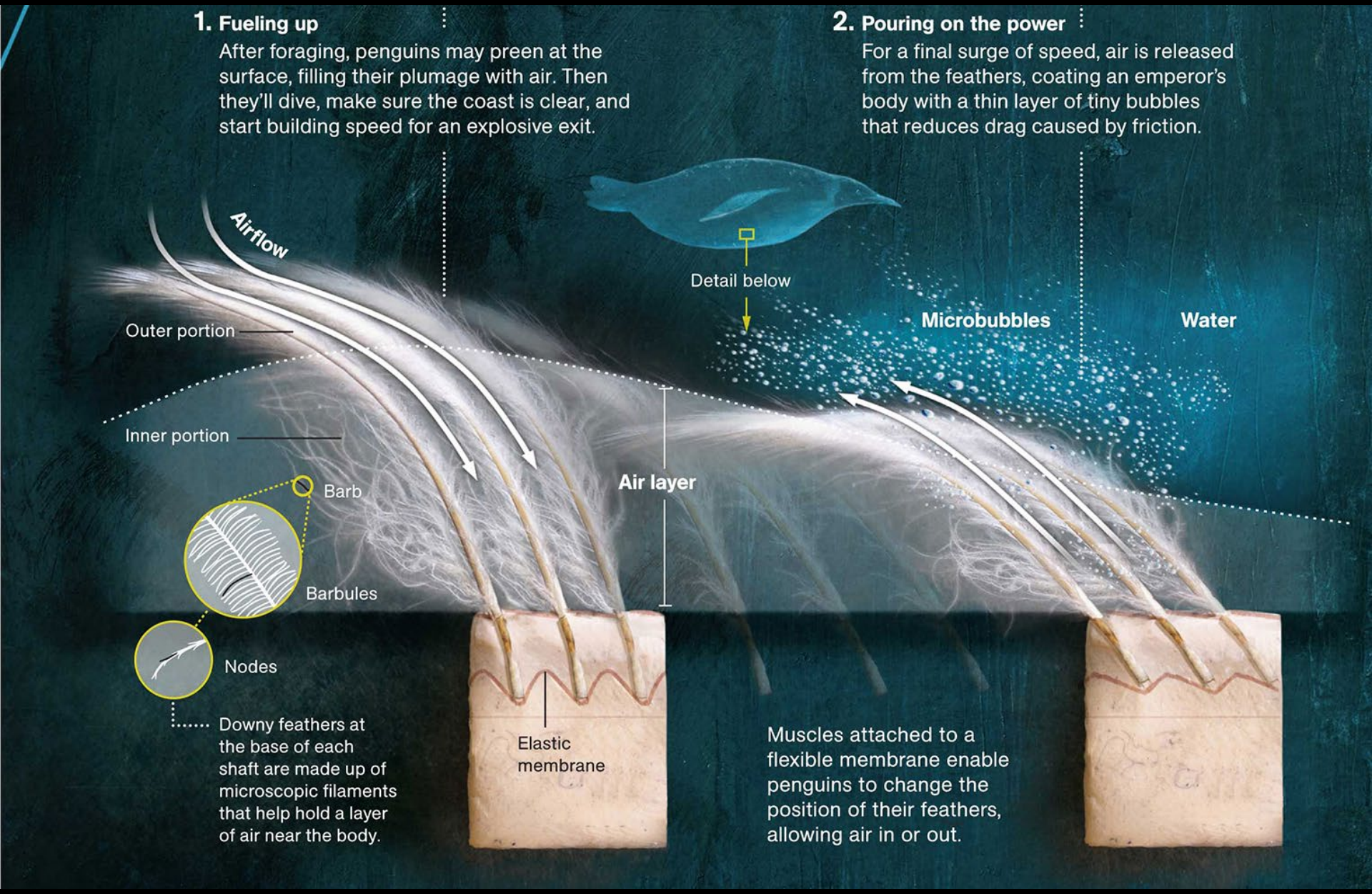


PENGUINS HIT THE GAS

Emperor penguins are famous for their spectacular leaps from the water, but only recently have scientists begun to understand the blend of body mechanics and physics that helps these flightless birds soar.

Penguin feather


Ice layer
Sometimes penguins follow the air path of others.
Leopard seal threat
Speed
6.5
feet/second
45 feet
Speed
18
feet/second


1. Fueling up
After foraging, penguins may preen at the surface, filling their plumage with air. Then they'll dive, make sure the coast is clear, and start building speed for an explosive exit.
2. Pouring on the power
For a final surge of speed, air is released from the feathers, coating an emperor's body with a thin layer of tiny bubbles that reduces drag caused by friction.
Airflow
Detail below
Microbubbles
Water
Outer portion
Inner portion
Air layer
Barb
Barbules
Nodes
Downy feathers at the base of each shaft are made up of microscopic filaments that help hold a layer of air near the body.
Elastic membrane
Muscles attached to a flexible membrane enable penguins to change the position of their feathers, allowing air in or out.

different types of
infographics

statistical

SMHI

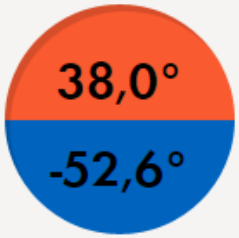
HUR VAR VÄDRET?

Rekord för Sverige 1756-2013

Populära orter — Välj ort

Alla orter — Välj från karta

TEMPERATUR



Högst: Målilla, 1 juni 1947
Lägst: Vuoggatjålme, 2 februari 1966

NEDERBÖRD, DYGN

Högsta dygnsnederbörd:
Fagerheden, 28 juli 1997

SOLTIMMAR

Soligaste månaden:
Umeå, juni 1970

STÖRSTA SNÖDJUP

Största snödjup:
Leipikvattnet, 22 februari 1989

NEDERBÖRD, MÅNAD

Högsta månadsnederbörd:
Jormlien, januari 1989

VINDHASTIGHET

Högsta medelvind:
Stekenjokk, 16 november 2013

HUMAN EVOLUTION timeline

A cursory glance at the timeline of physical, behavioral, and social differences between our human ancestors, archaeological and anthropological evidence, the expansion and migration of the human race.

By: Greer Berry

Why does it matter?

Looking at our family tree allows us to better understand our species as a whole and looking at how evolution has shaped us

Sahelanthropus tchadensis

The Sahelanthropus tchadensis had a chimp-like brain, however, like more modern humans, they walked upright and had smaller canine teeth, This is the first instance of a bipedal "human".

7-6 MYA

Orrorin tugenensis

Two femur bones suggest the O. tugenensis walked upright. Other archeological evidence shows apelike teeth and curved fingers for navigating trees.

6.2-5.8 MYA

Ardipithecus Kadabba

Originally thought to be a subspecies of Ardipithecus ramidus, the discovery of more primitive teeth led scientists to separate the two species. Archeologists have used the habitat of the A. kadabba to determine that upright walking evolved in closed wooded areas rather than open savannas.

5.8-5.2 MYA

Ardipithecus ramidus

Skeletal evidence show that A. ramidus walked upright but also had opposable big toes to climb trees. Canine teeth indicate a similarity in size of male and female.

4.4 MYA

Australopithecus anamensis

The upper end of the tibia is elongated, meaning the A. anamensis was mostly bipedal. This species typically lived in the woods.

4.2-3.9 MYA

Australopithecus afarensis

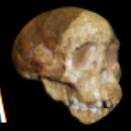
The famous "Lucy" skeleton belongs to this species. Though the A. afarensis possesses an apelike facial structure, braincase, arms, and fingers -- their small canine teeth and upright body and arched feet helped the species survive during periods of climate instability.

3.85-2.95 MYA

Homo habilis

Its name, meaning "handy man," was given in the 60s when researchers thought the H. habilis was the first species to make stone tools . Today we know that the first tool users came slightly before this species.

2.4-1.4 MYA



Australopithecus africanus

Members of this species were mostly vegetarian, much like modern apes. Fruits, vegetables, nuts, seeds, and eggs comprised their diet. Dental fossils indicate they ate tough foods.

3.3-2.1 MYA

Paranthropus robustus

Similar to the P. boisei, the P. robustus has a bony ridge used to support the large muscles of the jaw. These muscles were used to eat tough foods. The term "robust" is used in reference to the species large head.

1.8-1.2 MYA

Paranthropus boisei

This species possessed a bony ridge at the top of their head which anchored massive chewing muscles and a powerful jaw. P. boisei are thought to have lived along side the Homo erectus species.

2.3-1.2 MYA

Homo Erectus

The H. erectus is thought to have been the first early humans to make hearths, eat significant amounts of animal meat,, and care for the old and weak. H. erectus is the longest living species in our family tree.

1.89-0.143 MYA

Homo heidelbergensis

The first early humans to migrate into Europe. H. heidelbergensis hunted for food using wooden spears and built shelters.

7-200,000 YA

Homo neanderthalensis

The skull of this species had a large middle part of the face, angled cheek bones, and a large nose used to humidify cold air. The body of H. neanderthalensis was ideal for heat conservation. They were the first early human species to wear clothes, have language, bury their dead, and exhibit symbolic behaviour.

400-40,000 YA

Homo floresiensis

This is the last species to go extinct. They coexisted with humans during most of their existence. It is the smallest species in the genus Homo. Due to scarcity of resources, they had small brains and bodies, gaining them the nickname "hobbit".

95-17,000 YA

200,000- Now

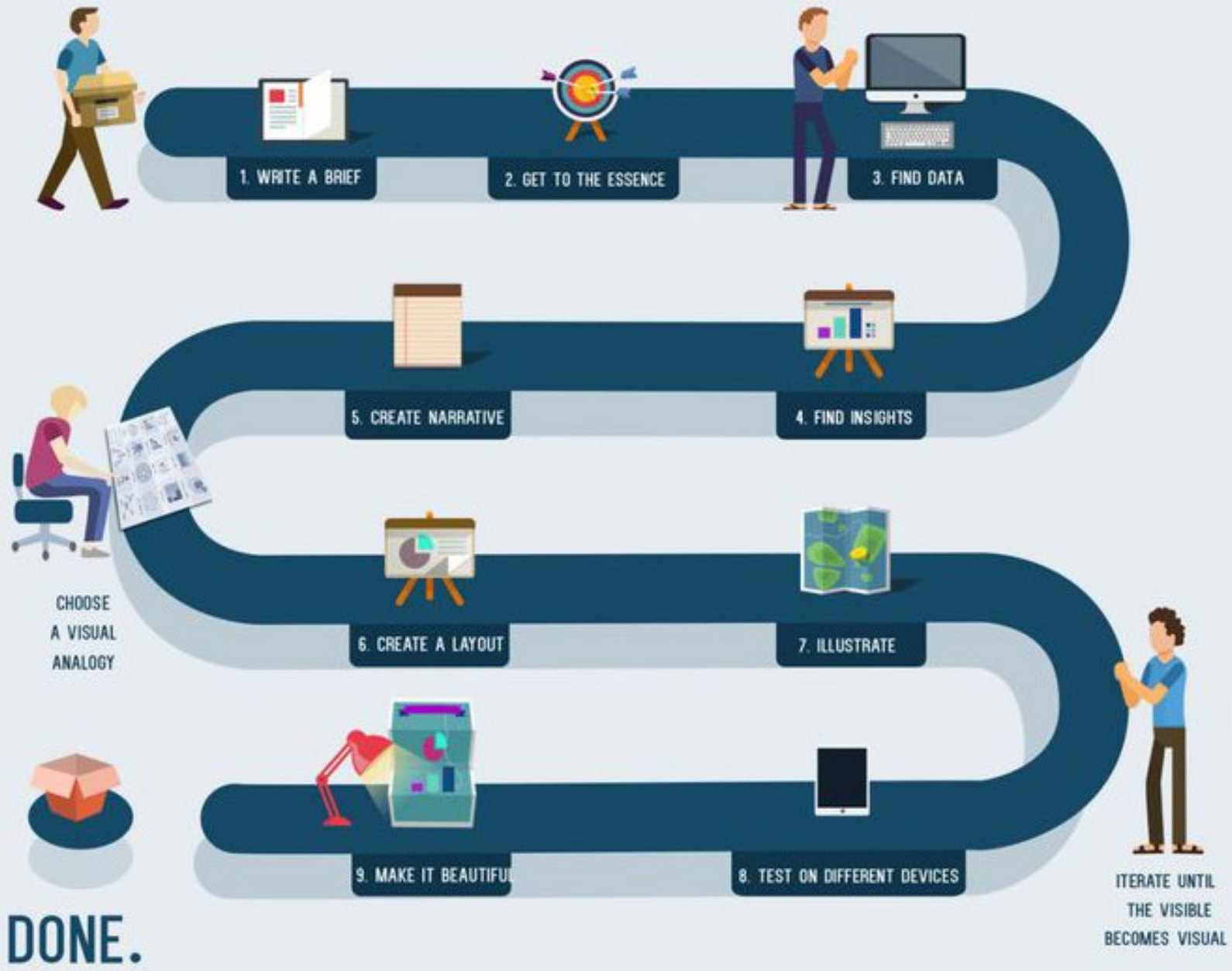
Homo sapiens

Our species evolve in Africa around 200,000 years ago and began to migrate globally around 100,000 years ago. We are the sole surviving species left in our "family tree"

informational infographics

HOW TO MAKE INFOGRAPHICS

BY ANNA VITAL

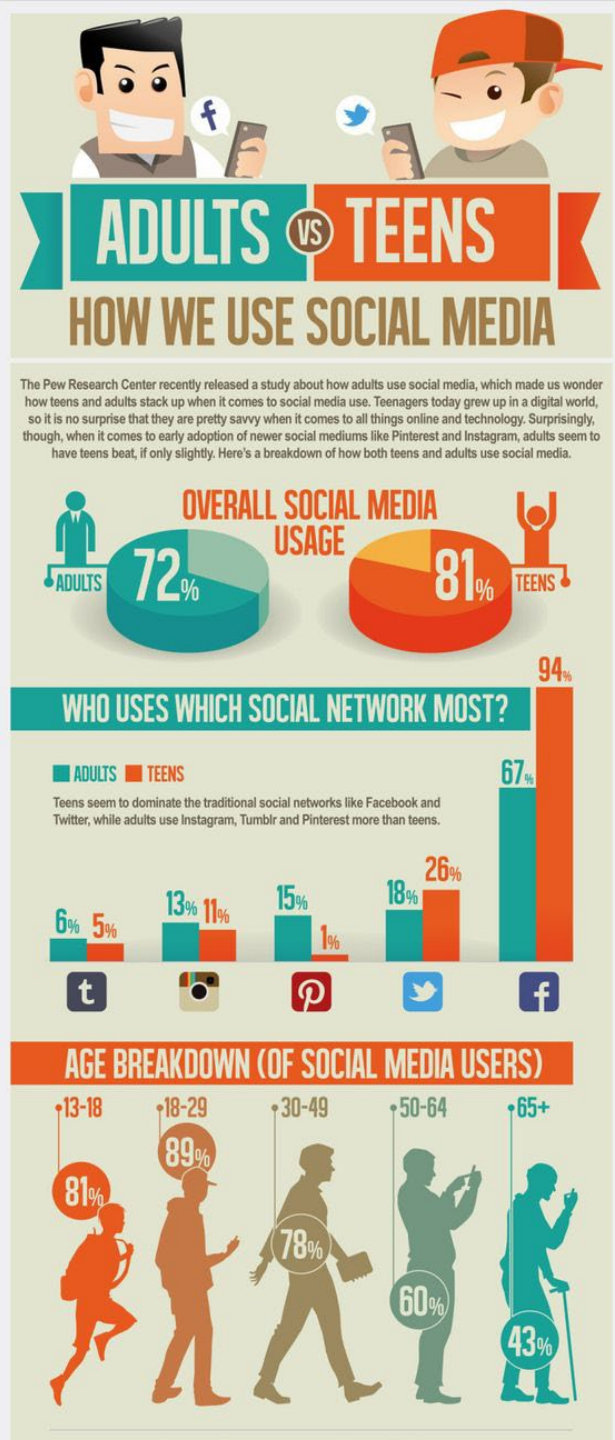


PROCESS


PERILOUS JOURNEYS
It's an extraordinary feat. Three billion birds of some 300 species—songbirds, waterbirds, raptors—migrate thousands of miles for summer breeding in Eurasia, then return to Africa for winter. They navigate by cues still not fully understood: the sun, the stars, landforms, scents, even Earth's magnetic field. Almost all their numbers are falling, mainly due to habitat loss. The additional toll of illegal and indiscriminate hunting claims hundreds of millions of birds a year.
Northern bald ibis
Saker falcon
Oriolan bunting
Red-backed shrike
Hoopoe
Red-breasted goose
WHY BIRDS DIE
WHERE THEY GATHER
TOP OFFENDERS
MAJOR MIGRATION CROSSINGS
A SOUTHERN SPAIN
B CENTRAL MEDITERRANEAN
C ADRIATIC
D EASTERN MEDITERRANEAN
BIRD HAVENS
EUROPE
AFRICA
ASIA

geographic


STOCKHOLM T-BANA
1 Thorildsplan
2 Fridhemsplan
3 Sankt Eriksplan
4 Odenplan
5 Rådmansgatan
6 Hötorget
Akalla
Husby
Kista
Hjulsta
Tensta
Rinkeby
Kymlinge
Rissne
Hallonbergen
Duvbo
Näckrosen
Hässelby gård
Johannelund
Sundbybergs centrum
Solna centrum
Vällingby
Hässelby strand
Råcksta
Huvudsta
Blackeberg
Västra skogen
Islandstorget
Ängbyplan
Åkeshov
Brommaplan
Abrahamsberg
Stormossen
Alvik
Kristineberg
Stadshagen
Mörby centrum
Danderyds sjukhus
Bergshamra
Universitetet
Tekniska högskolan
Stadion
Ropsten
Gärdet
Karlaplan
Östermalmstorg
T-centralen
Kungsträdgården
Råd huset
Gamla stan
Slussen
Hornstull
Liljeholmen
Aspudden
Örnsberg
Bredäng
Sätra
Skärholmen
Vårberg
Vårby gård
Masmo
Fittja
Alby
Hallunda
Norsborg
Midsommarkransen
Telefonplan
Mälarhöjden
Axelsberg
Hägerstensåsen
Västertorp
Fruängen
Zinkensdamm
Mariatorget
Medborgarplatsen
Skanstull
Gullmarsplan
Skärmarbrink
Globen
Enskede gård
Sockenplan
Svedmyra
Stureby
Bandhagen
Rågsved
Hagsätra
Högdalen
Hammarbyhöjden
Björkhagen
Kärrtorp
Blåsut
Sandsborg
Skogskyrkogården
Bagarmossen
Skarpnäck
Tallkrogen
Gubbängen
Hökarängen
Farsta
Farsta strand


ADULTS VS TEENS
HOW WE USE SOCIAL MEDIA
The Pew Research Center recently released a study about how adults use social media, which made us wonder how teens and adults stack up when it comes to social media use. Teenagers today grew up in a digital world, so it is no surprise that they are pretty savvy when it comes to all things online and technology. Surprisingly, though, when it comes to early adoption of newer social mediums like Pinterest and Instagram, adults seem to have teens beat, if only slightly. Here's a breakdown of how both teens and adults use social media.
OVERALL SOCIAL MEDIA USAGE
ADULTS
72%
81%
TEENS
WHO USES WHICH SOCIAL NETWORK MOST?
ADULTS TEENS
Teens seem to dominate the traditional social networks like Facebook and Twitter, while adults use Instagram, Tumblr and Pinterest more than teens.
6% 5%
13% 11%
15% 1%
18% 26%
67% 94%
AGE BREAKDOWN (OF SOCIAL MEDIA USERS)
13-18
18-29
30-49
50-64
65+
81%
89%
78%
60%
43%

comparison

5 steps

1 choose your topic

2 do your research

3 find a story

4 look for inspiration

5 design your infographic

5 steps

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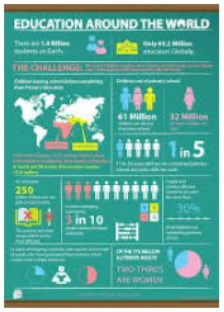
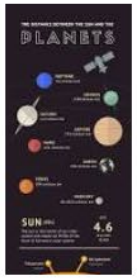
Google

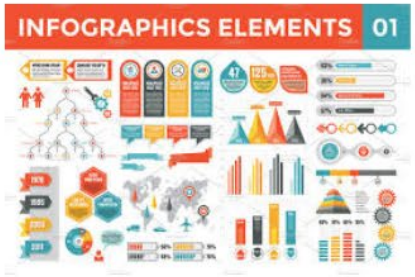
infographics

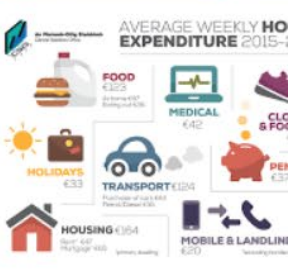
All | Images | News | Videos | Books | More | Settings | Tools | View saved

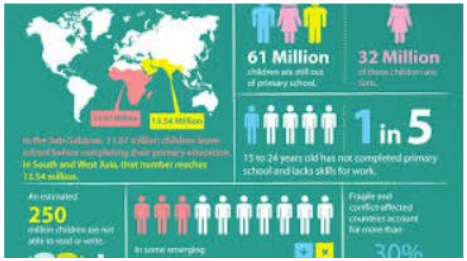
simple | creative | health | food | person | disney | marvel | education | music | diabetes | comparison | car | drug | data visualization












Pinterest

slideshare

5 steps

1 choose your topic 

2 do your research 

3 find a story

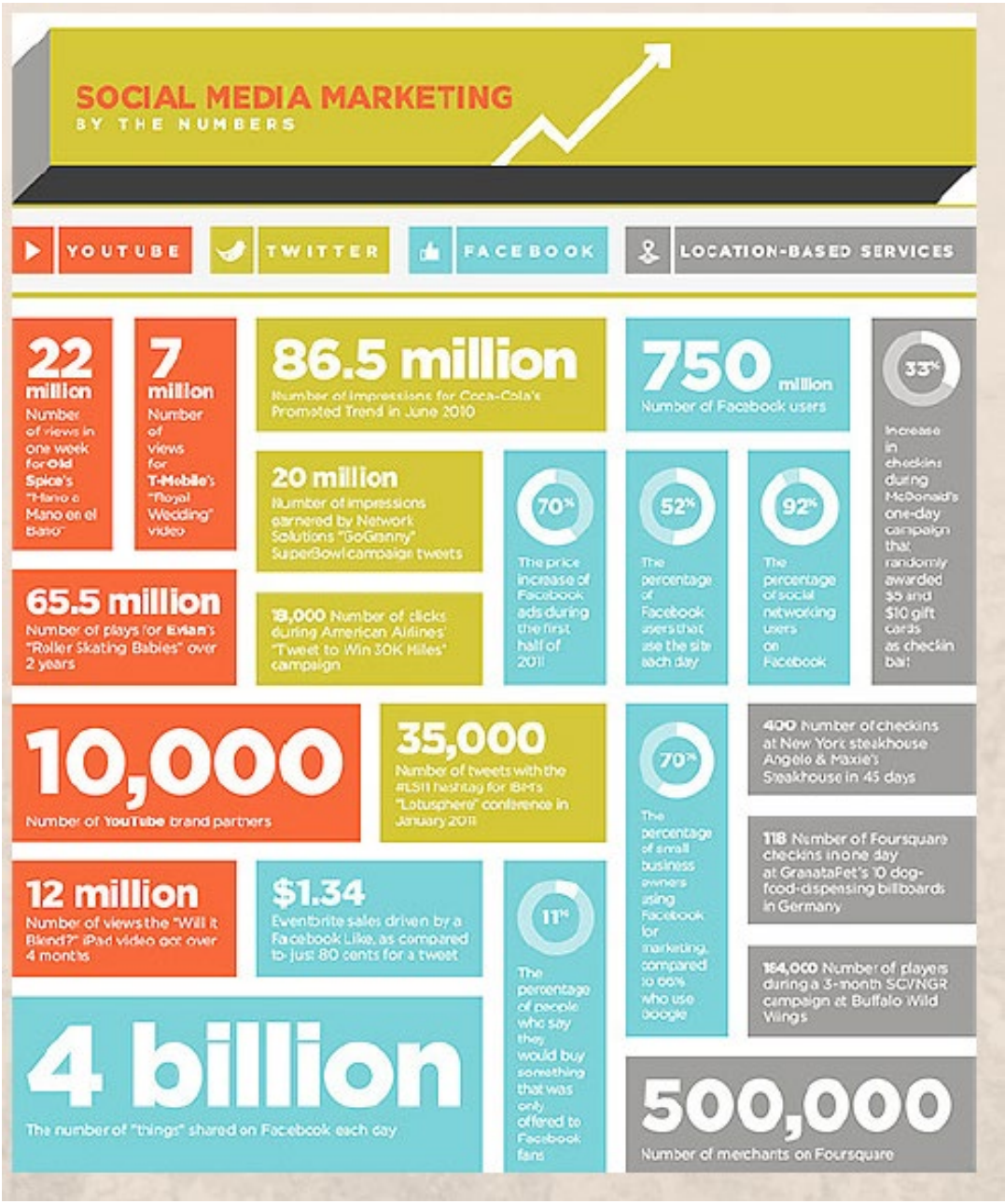
4 look for inspiration

5 design your infographic

SOFTWARE

SOFTWARE

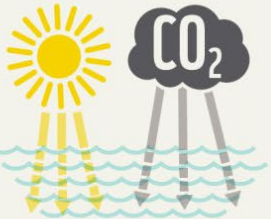
SOFTWARE


SOCIAL MEDIA MARKETING
BY THE NUMBERS
YOUTUBE
TWITTER
FACEBOOK
LOCATION-BASED SERVICES
22 million
Number of views in one week for Old Spice's "Mano o Mano en el Baño"
7 million
Number of views for T-Mobile's "Royal Wedding" video
86.5 million
Number of impressions for Coca-Cola's Promoted Trend in June 2010
750 million
Number of Facebook users
33%
Increase in checkins during McDonald's one-day campaign that randomly awarded $5 and $10 gift cards as checkin bait
20 million
Number of impressions earned by Network Solutions "GoDaddy" SuperBowl campaign tweets
70%
The price increase of Facebook ads during the first half of 2011
52%
The percentage of Facebook users that use the site each day
92%
The percentage of social networking users on Facebook
65.5 million
Number of plays for Evian's "Roller Skating Babies" over 2 years
18,000 Number of clicks during American Airlines' "Tweet to Win 30K Miles" campaign
10,000
Number of YouTube brand partners
35,000
Number of tweets with the #LSII hashtag for IBM's "Lotusphere" conference in January 2011
70%
The percentage of small business owners using Facebook for marketing, compared to 66% who use Google
400 Number of checkins at New York steakhouse Angelo & Maxie's Steakhouse in 45 days
118 Number of Foursquare checkins in one day at GranataPet's 10 dog-food-dispensing billboards in Germany
12 million
Number of views the "Will It Blend?" iPad video got over 4 months
$1.34
Eventbrite sales driven by a Facebook Like, as compared to just 80 cents for a tweet
11%
The percentage of people who say they would buy something that was only offered to Facebook fans
184,000 Number of players during a 3-month SCVNGR campaign at Buffalo Wild Wings
4 billion
The number of "things" shared on Facebook each day
500,000
Number of merchants on Foursquare

Climate CoP21: Ocean Health ↔ Climate Change

Problem

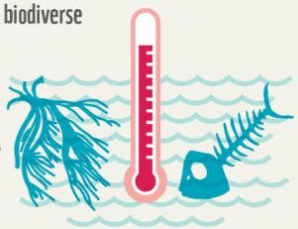
Our Ocean's ability to buffer climate change impacts by storing additional heat and carbon is weakening.

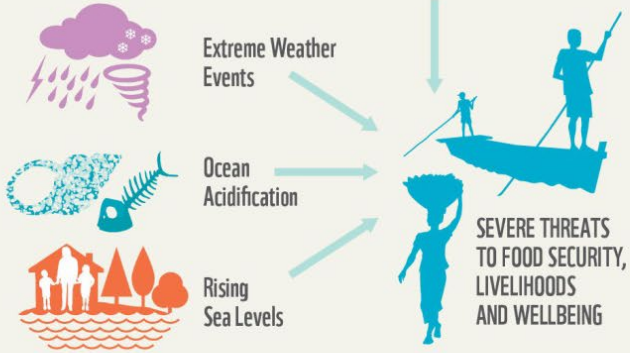


Consequences

Temperature rise and acidification are threatening one of the earth's most productive and biodiverse ecosystems: CORAL REEFS.

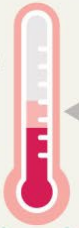
At current rates of temperature rise, coral reefs will disappear by 2050, along with habitat for > million species, food, jobs, coastal protection, medicine and other resources for hundreds of millions of people.



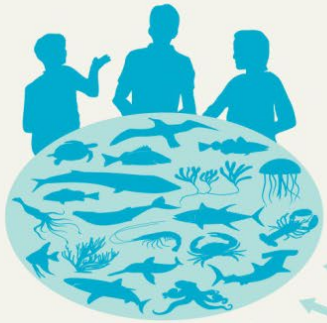


Solutions

Minimize climate change impacts and risks by reducing CO_2 emissions to limit temperature rise to ≤1.5°C

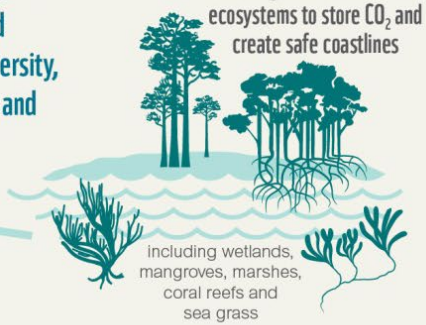


≤ 1.5°C Temperature Rise

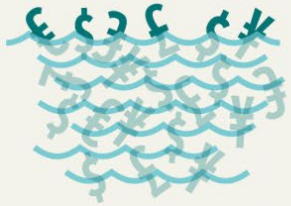


Maximize marine and coastal ecosystem based management for mitigation and adaptation to maximize marine biodiversity, productivity, resilience, food security and carbon sequestration, by:

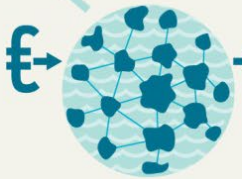
Restoring coastal and marine ecosystems to store CO_2 and create safe coastlines



including wetlands, mangroves, marshes, coral reefs and sea grass

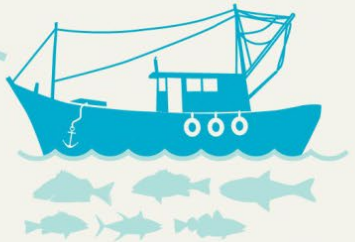


Explicitly including marine and coastal climate solutions for mitigation and adaptation in climate finance mechanisms and funds



The net benefits are projected to be at least triple the costs

Implementing effective networks of marine protected areas to cover 30% of the ocean; Marine Protected Areas (MPAs) are effective tools to create resilient marine ecosystems that can bounce back from climate change impacts



Reducing human pressures, including transforming of destructive fishing practices into sustainable fisheries and recovering the US$50 billion per year lost due to inefficiencies and illegal, unregulated and unreported fishing

Sources: Hoegh-Guldberg, O. et al. 2015. Reviving the Ocean Economy: the case for action - 2015. WWF International, Gland, Switzerland., Geneva, 60 pp.
Reuchlin-Hugenholtz, E., McKenzie, E. 2015. Marine protected areas: Smart investments in ocean health. WWF, Gland, Switzerland.

a)

Evolution of Apple

1991 Apple introduces the PowerBook portable computer. Significant increase in revenue

1985 Fighting between Jobs and Apple Computer CEO John Sculley. Jobs resigns from Apple and founds NeXT Inc.

1984 On January 22, Apple launches the Macintosh with the now-famous "1984" ad, shown during Super Bowl XVIII. Strong sales lead the company to go public.

1983 They release "Lisa" as the first personal computer sold to the public with a graphic user interface (GUI). Its high price and limited software doomed Lisa to commercial failure.

1980 In May, the Apple III is released, competing with IBM and Microsoft in business computing

1977 Apple Computer is incorporated and the Apple II is introduced

1976 Steve Jobs quits his job at Atari and persuades Steve Wozniak to quit his job at Hewlett-Packard to start Apple Computer out of Jobs' garage. They launch the first Apple computer, the Apple I personal computer kit, priced at $666.66.

logo from 1976~1998

current logo

first logo

1994 Apple joins forces with IBM and Motorola to create the PowerPC Reference Platform

1997 Apple CEO Gil Amelio decides to purchase NeXT and bring Jobs back to Apple as an advisor. Amelio is ousted, and Jobs becomes interim CEO.

1998 Apple introduces the all-in-one iMac, designed by Jonathan Ive. Sales put Apple in the black for the first time since 1993

2001 Apple announced Mac OS X, and the iPod. Their first Apple retail stores open.

2003 The iTunes Store opens up online.

2006 Apple announces it will integrate Intel processors into Macs.

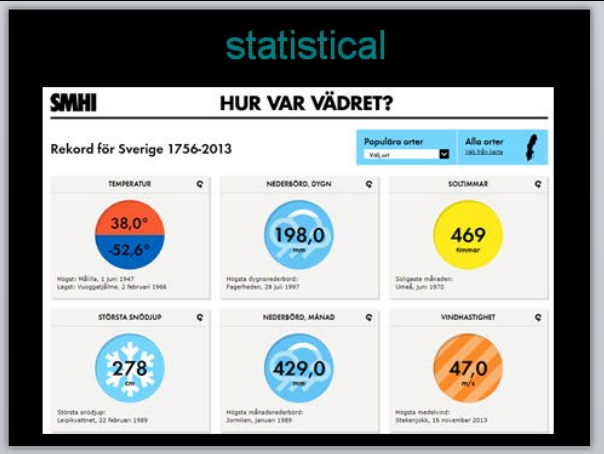
2007 Apple announces that it has dropped "Computer" from its name and launches the iPhone and Apple TV. In May, Apple's share price surpasses $100.

2008 On July 11, Apple launches the App Store.

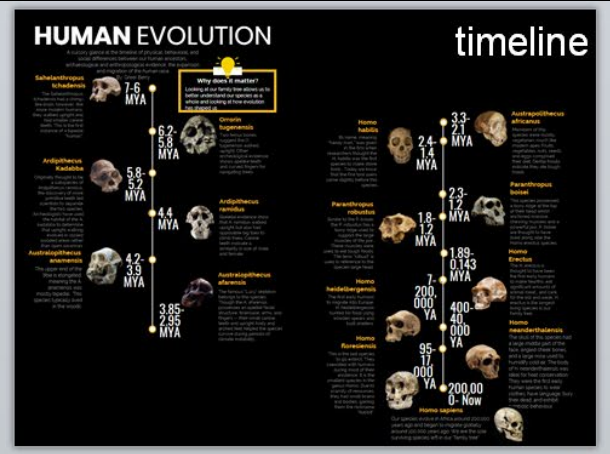
2009 On January 14, Jobs takes a medical leave of absence.

b)

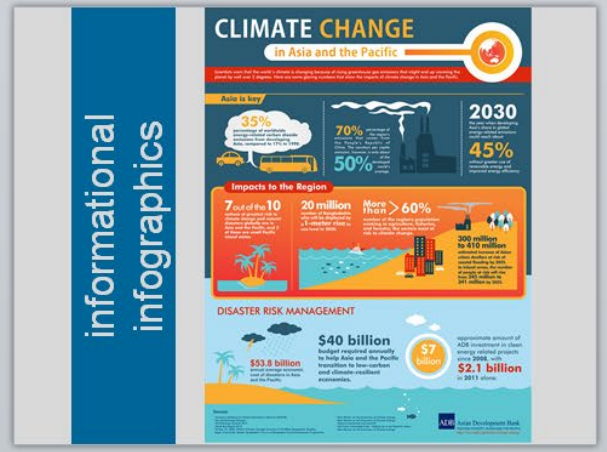
which one?



1



2



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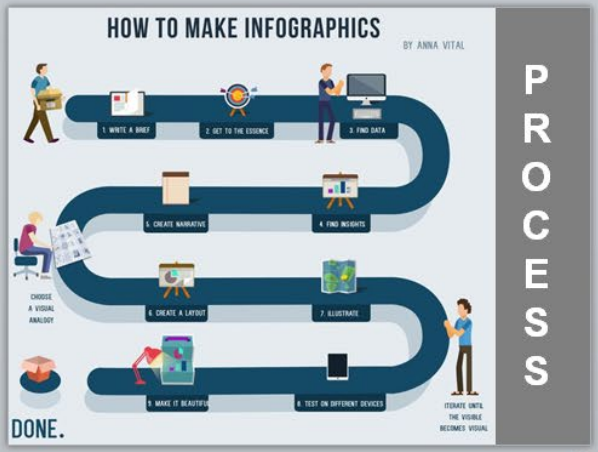

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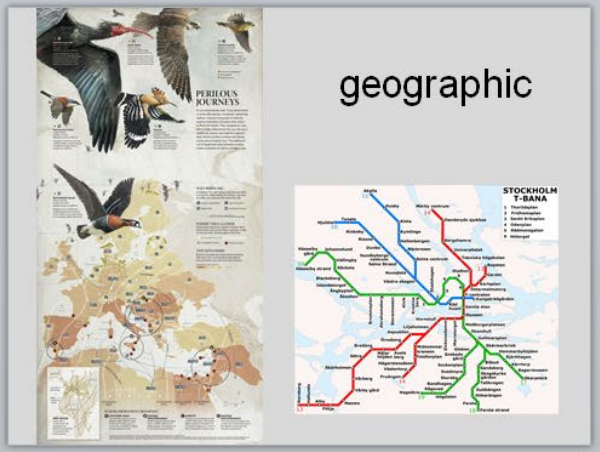

5

6

JUST DO IT.

CRESCENDO SCHOOLS

Network of Schools for Earth System Modelling & Climate Change

Sources:

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