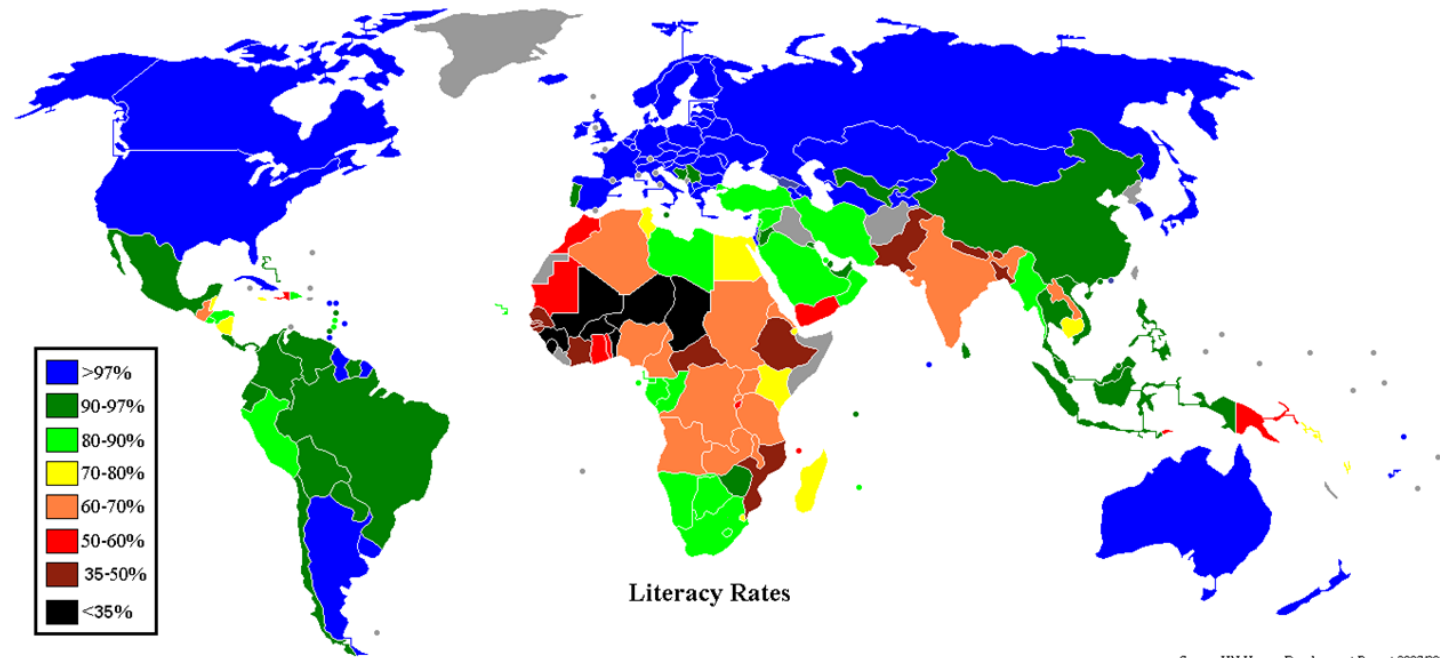


LARGE-Scale Patterns in Global Communication & Culture



Harold Adams Innis

The Development and Evolution of Global
Media & Communication

Harold Innis (1894-1950) Background

Global Communication Scholar

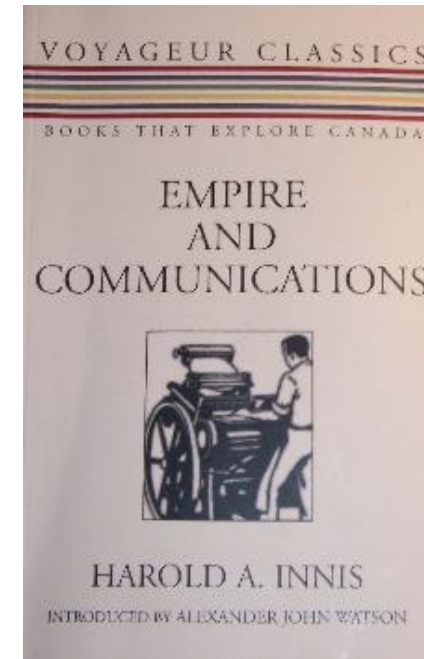
- Canadian Social Historian--really a **sociologist/economist**
 - A **non-conformist** scholar— interdisciplinary
 - The University of Chicago, School of Sociology (under Lewis Mumford, Robert Park, George Herbert Meade – economics combined with symbolic interactionism)
 - Completed his PhD. at the University of Chicago in 2 years. Innis' dissertation focused on the **history of TECHNOLOGY**. Specifically, the impact of the railway (as a technology) in creating Canadian Society (economics, culture, communication).
- A **structuralist**. He looked at the underlying structures (foundational pillars) that shaped culture.
- One of the original "founders" of **GLOBAL Media and Communication** as an academic discipline.
Innis→Marshall McLuhan→ American/European Media, Comm, Cultural Studies, etc

• Books by Innis:

- Minerva's Owl (1938) Looks at how the mass print media made "culture" a sellable commodity.
- The Bias of Communication (1950)
- Empire and Communications (1952)
- A World History of Communication (**unpublished** 1,200 pages long)

→ **FOUNDATIONAL ARGUMENT#1**: Media & Communication Techniques and Technologies serve as one of the most culturally transformative (and under-examined) forces of historical change for ALL cultures.

→ **FOUNDATIONAL ARGUMENT #2**: If you want to truly understand the **transformation of human society and civilizations ON A GLOBAL SCALE**, then you **must** examine the **(1) ECOLOGY/MIX of media technologies, (2) the BIASES** that they instill, and **(3) intended and UN-intended consequences**.



The TRANSFORMATIVE POWER of Media and Communication TECHNIQUES & TECHNOLOGIES across cultures

Key Idea/Argument:

Our media techniques & technologies constantly FILTER & SHAPE both our INFORMATIONAL DIETS and our BEHAVIORAL LIVES in largely “invisible” ways.

1. “Normalization” → most mainstream media devices become quickly “normalized.” That is the more they are used or promoted, the more they appear “normal,” “common-place,” and largely UNQUESTIONED.

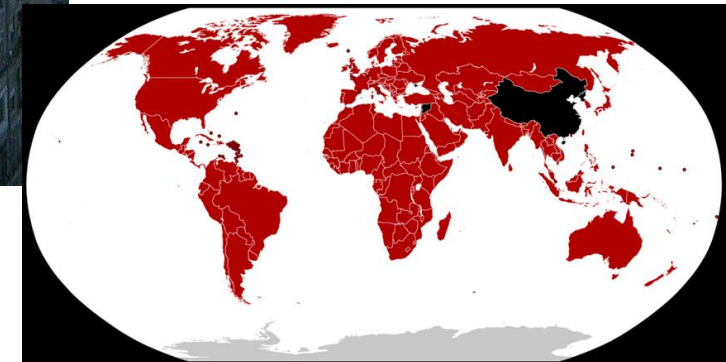
2. HABITUAL-Ritualistic MEDIA USE → “Invisibility”

- a. We are largely UNCONSCIOUS of our media consuming habits!
- b. People DO NOT tend to earnestly question their communication devices, habits, or the people who control such devices or media technologies.
- c. MEDIA INFLUENCE often goes unnoticed by the general populace at both an individual level and a mass level.

3. HABITS OF MIND → INFORMATION CONFIRMATION BIAS:

- People tend to rely on sources of information which simply confirm what they already believe. We tend to create information “bubbles.”

4. This tends to lead to conservative HABITS OF MIND and dogmatic media filters.



Filter Bubbles

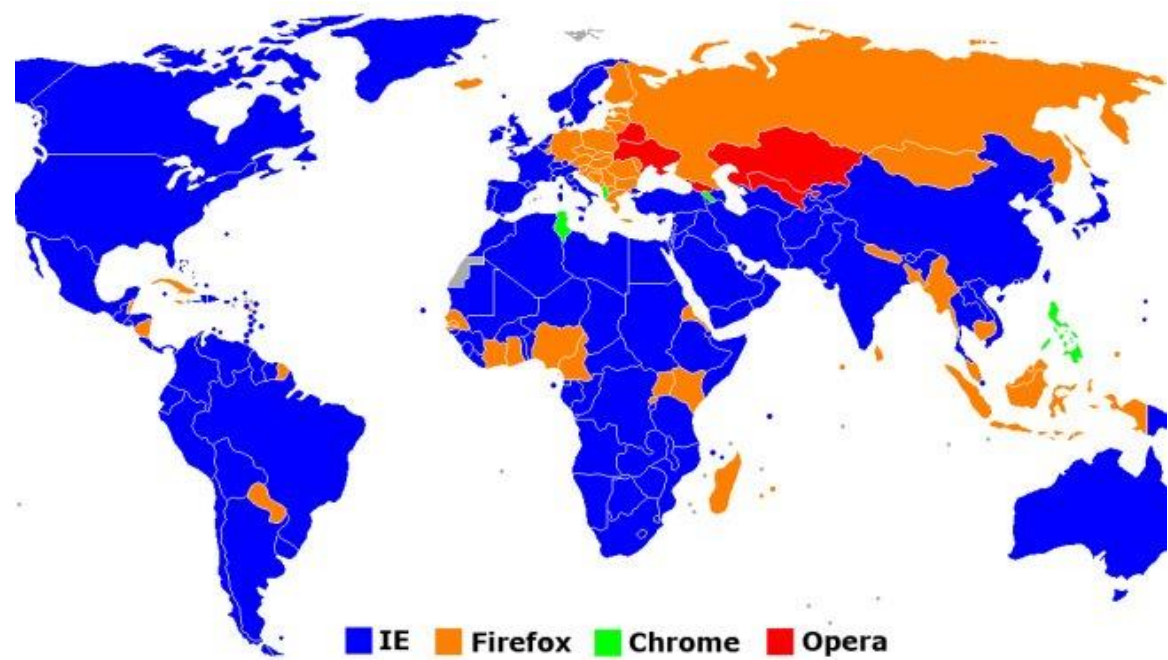
- [Eli Pariser Filter Bubbles](#)



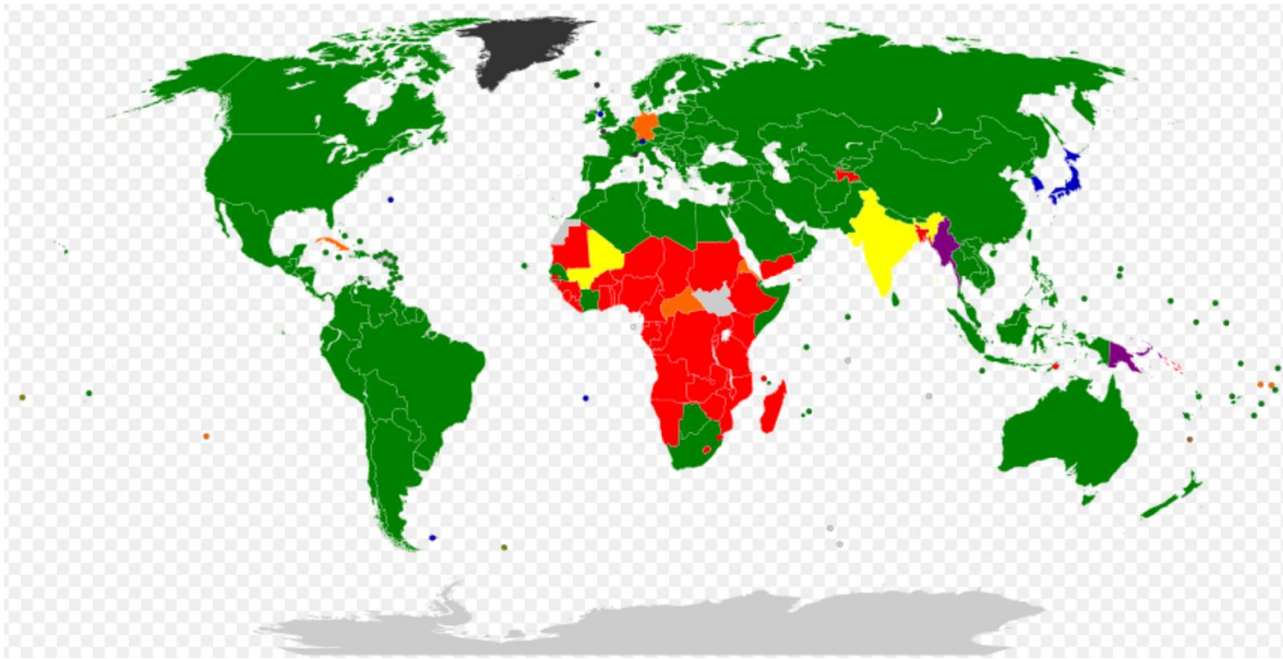
Key Questions:

1. What is a “**Filter Bubble**”?
2. How do they operate?
3. What is an “**algorithm**”?
4. What’s the difference between **filter bubbles** and **corporate CENSORSHIP**?

BROWSER DOMINANCE ~2009

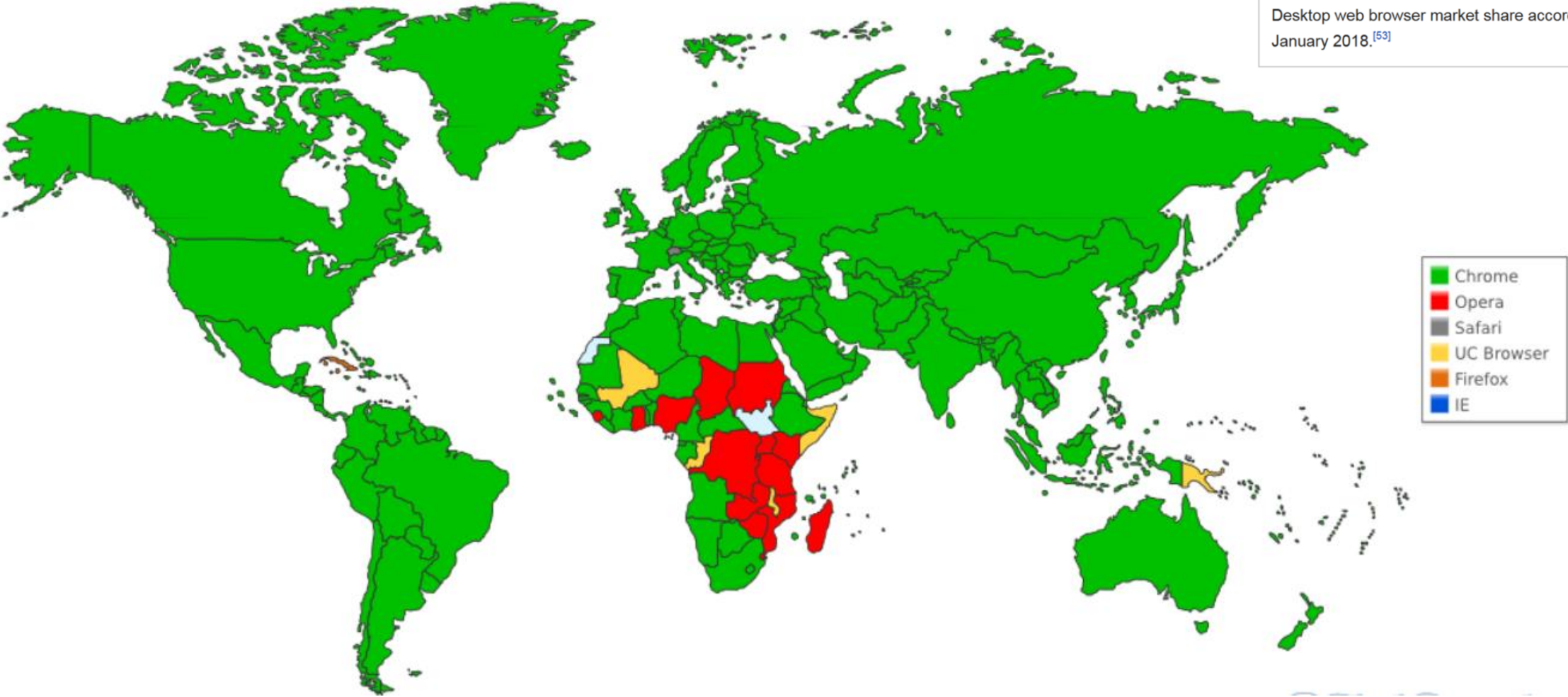
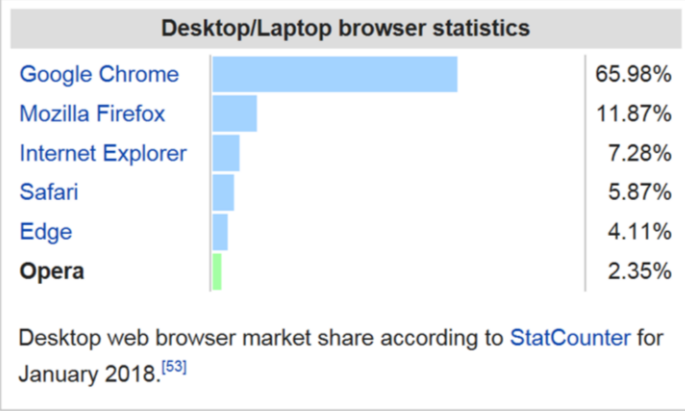


BROWSER DOMINANCE 2015



Most used web browser by country as of June 2015, before the launch of Microsoft Edge [1]

Browser Dominance July 2018

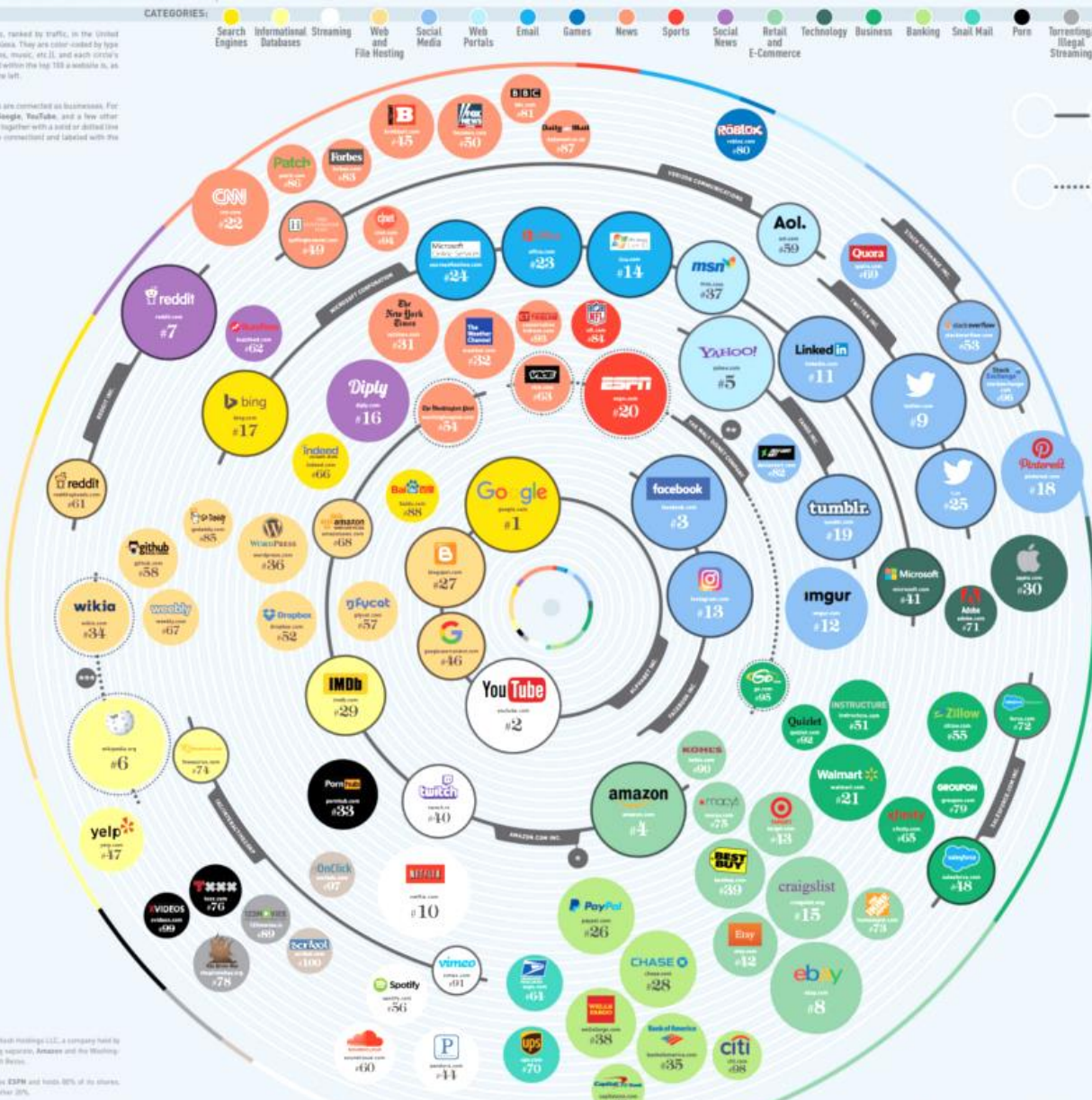


100 Websites that “Rule” the internet

100 WEBSITES that Rule the Internet

These are the top 100 websites, ranked by traffic, in the United States, according to data from Alexa. They are color-coded by type: Banking sites, streaming videos, music, etc. Each circle's size indicates how highly ranked within the top 100 a website is, as you can see by the diagram to the left.

You can also see which websites are connected as businesses. For instance, Alphabet Inc. owns Google, YouTube, and a few other sites. These websites are linked together with a solid or dotted line depending on the nature of the connection and labeled with the organization they fall under.



The top 10 sites on the web

Based on data from Alexa, a combination of the highest visitors and page views.

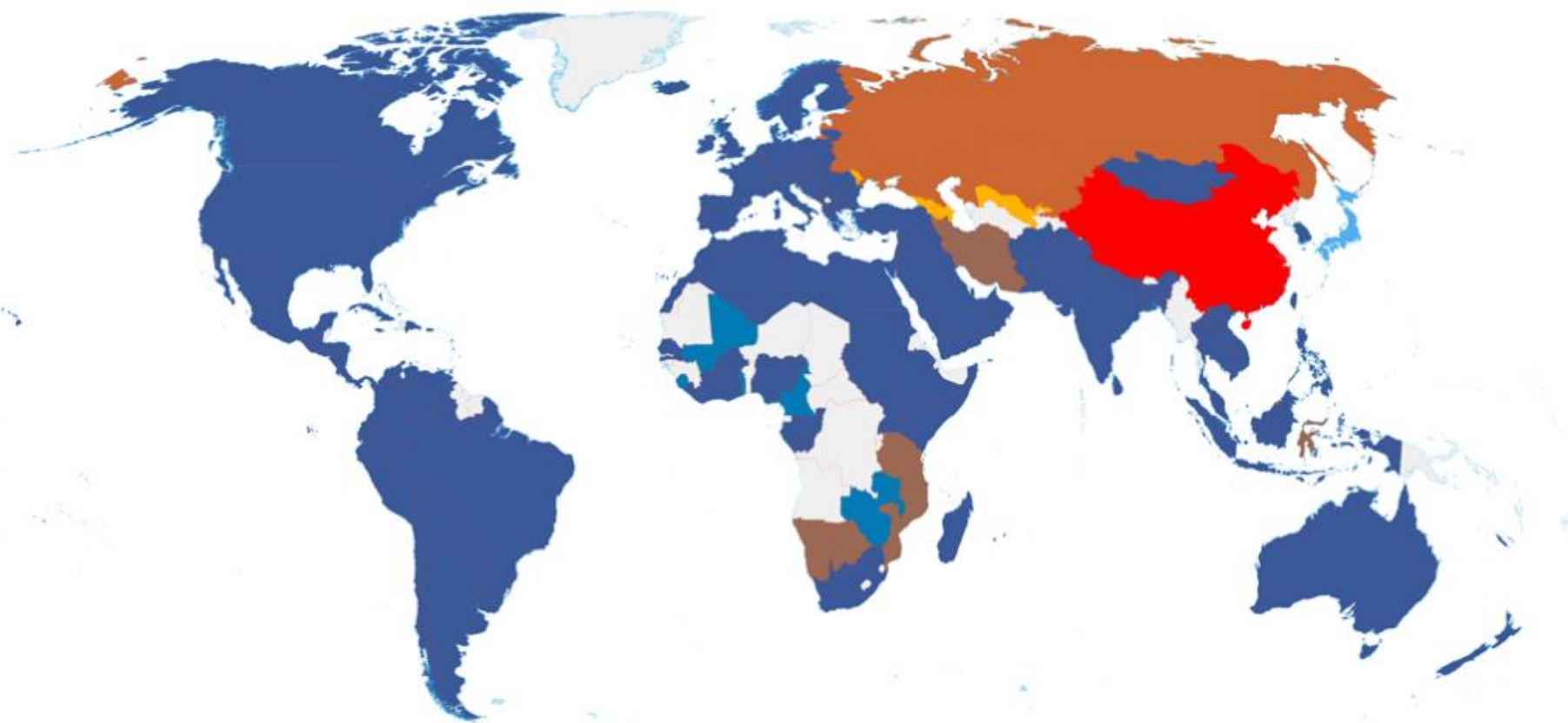
	Daily Page Views (per person)	Daily Time on Site (mins)
Google.com	8.6	8:45
Youtube.com	5.38	9:21
Facebook.com	5.17	13:25
Baidu.com	6.63	7:44
Wikipedia.org	3.31	4:26
Yahoo.com	3.88	4:27
Google.co.in	7.12	8:24
Reddit.com	9.53	14:05
Qq.com	4.52	5:03
Taobao.com	4.48	8:33

Source: Alexa.com

Source: World Economic Forum 2017

WORLD MAP OF SOCIAL NETWORKS

January 2017



Facebook

QZone

V Kontakte

Odnoklassniki

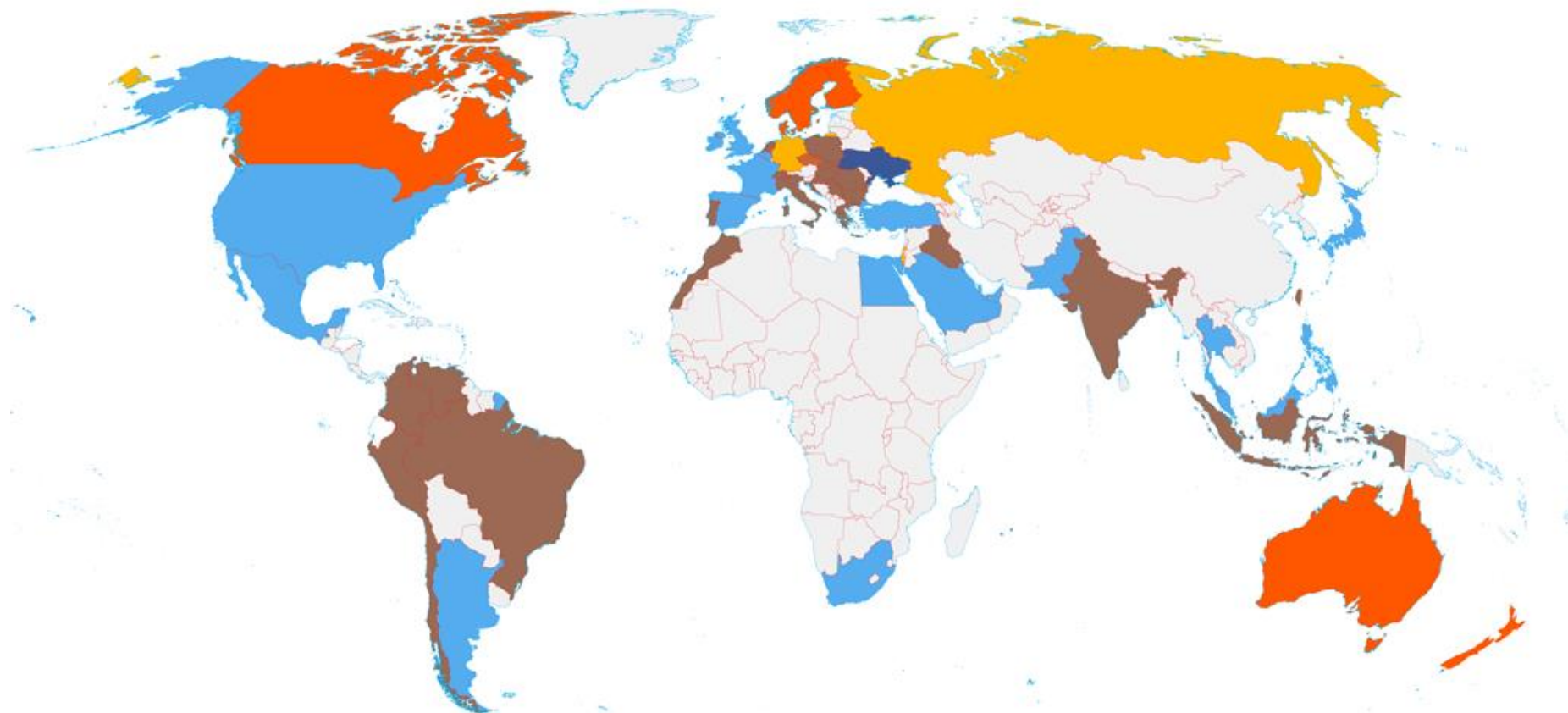
Twitter

LinkedIn

Instagram

2nd Ranked Social Networks 2018

Ranked 2nd - January 2018



Instagram

Odnoklassniki

Twitter

V Kontakte

Reddit

Facebook

credits: Vincenzo Cosenza vincos.it

license: CC-BY-NC

source: SimilarWeb/Alexa

Smartphone use falls among young for first time

By Rebecca Marston
Business reporter, BBC News

🕒 30 October 2017

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June King is in almost constant contact with her phone

Are we seeing the start of peak phone?

For the first time, young people in the UK aged between 16 to 24 are spending slightly less time on their smart devices, according to a report.

Market researcher Kantar TNS found that those within that group now spent an average of 3.8 hours on their phones a day down from 3.9 hours last year.

Health

Millennials 'set to be fattest generation'

🕒 26 February 2018

[f](#) [t](#) [m](#) [e](#) [Share](#)



UK millennials are on track to be the most overweight generation since records began, health experts say.

Based on population trends, more than seven in every 10 people born between the early 1980s and mid-90s will be too fat by the time they reach middle age.

In comparison, about half of the "baby boomer" generation, born just after World War Two, were fat at that age.

Being fat as an adult is linked to 13 different types of cancer, says Cancer Research UK who did the analysis.

Technological “Interactive” “Norming” Toys and Ecological change

Barbie doll will be internet connected to chat to kids

🕒 17 February 2015 | Technology



Barbie is having a digital makeover, with the release of an internet-connected version of the iconic doll.

Toy maker Mattel is partnering with US start-up ToyTalk to develop Hello Barbie, which will have two-way conversations with children.

The Barbie will use a speech-recognition platform developed by ToyTalk.

A prototype of the doll was at the New York Toy Fair on 14 February, where a glut of smart toys were on display.

"The number one request we hear from girls around the world is that they want to have a conversation with Barbie. Now, for the first time ever, Barbie can have a two-way conversation," said a spokeswoman for Mattel.

The Hello Barbie will be able to play interactive games and tell stories and jokes.

Technological “Norming” and Ecological change

In the name of “Science” : Can you see the light?
Implant to “touch ultraviolet light”

Lab rats 'acquire sixth sense'

🕒 14 February 2013 | Science & Environment

US researchers have effectively given laboratory rats a "sixth sense" using an implant in their brains.

An experimental device allowed the rats to "touch" infrared light - which is normally invisible to them.

The team at Duke University fitted the rats with an infrared detector wired up to microscopic electrodes that were implanted in the part of their brains that processes tactile information.

The results of the study were **published in Nature Communications** journal.

The researchers say that, in theory at least, a human with a damaged visual cortex might be able to regain sight through a device implanted in another part of the brain.

Lead author Miguel Nicolelis said this was the first time a brain-machine interface has augmented a sense in adult animals.

The experiment also shows that a new sensory input can be interpreted by a region of the brain that normally does something else (without having to "hijack" the function of that brain region).

"We could create devices sensitive to any physical energy," said Prof Nicolelis, from the Duke University Medical Center in Durham, North Carolina.

"It could be magnetic fields, radio waves, or ultrasound. We chose infrared initially."



The rats had no reduction in their ability to "feel" things as a result

“

This is the first paper in which a neuroprosthetic device was used to augment function

Eric Thomson, Duke University

Amazon Enter!

Amazon buys 'smart' doorbell firm Ring

🕒 28 February 2018

f t m ✉ Share



Amazon has bought a US firm that makes high-tech doorbells in a move expected to help the online retailer improve how it delivers parcels.

Ring makes doorbells that record live videos of customers' doorsteps, then sends the videos to their smartphones.

The doorbell could help Amazon customers trust its new service which lets couriers open people's front doors and put deliveries inside.

Amazon is reported to have paid more than \$1bn to secure the Ring deal.

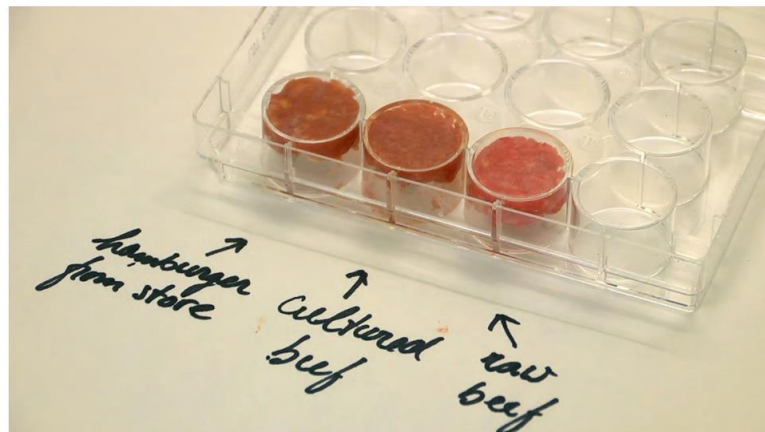
Amazon and Ring both declined to comment on the price, which was reported by Reuters.



Health & Science

Lab-grown meat is in your future, and it may be healthier than the real stuff

By Marta Zaraska May 2, 2016



Samples of beef including hamburger from a store, left, cultured beef, center, and raw beef. (Maastricht University via Bloomberg)

Scientists and businesses working full steam to produce lab-created meat claim it will be healthier than conventional meat and more environmentally friendly. But how much can they improve on old-school pork or beef?

In August 2013, a team of Dutch scientists showed off their [lab-grown burger](#) (cost: \$330,000) and even provided a taste test. Two months ago, the American company Memphis Meats fried the first-ever lab meatball (cost: \$18,000 per pound). Those who have tasted these items say they barely differ from the real deal.

deal.

The Dutch and the Americans claim that within a few years lab-produced meats will start appearing in supermarkets and restaurants. And these are not the only teams working on cultured meat (as they prefer to call it). Another company, Modern Meadow, promises that lab-grown “steak chips” — something between a potato chip and beef jerky — will hit the stores in the near future, too.

[How does a lab-created hamburger actually taste?]

For some people there’s an ick factor to the idea of lab-grown meat, but its backers say that cultured meat may help alleviate the environmental and health challenges posed by the world’s growing appetite for conventional meats. The Organization for Economic Cooperation and Development estimates that the demand for meat in North America will increase by 8 percent between 2011 and 2020, in Europe by 7 percent and in Asia by 56 percent.



Professor Mark Post from Maastricht University holds the world’s first lab-grown beef burger. (David Parry/AFP/Getty Images)



The burger was fried in a little oil and butter, and served to volunteers. (David Parry/AFP/Getty Images)

Meanwhile, a 2011 study calculated that growing meat in labs would cut down on the land required to produce steaks, sausages and bacon by 99 percent and reduce the associated need for water by 90 percent. What’s more, it found that a pound of lab-created meat would produce much less polluting greenhouse-gas emissions than is produced by cows and pigs, even poultry.

A 2015 life-cycle analysis of potential cultured meat production in the United States painted a less rosy picture if one includes the generation of electricity and heat required to grow the cells in a lab.

[What makes a hamburger and other cooked meat taste so good?]

Corporate Fitness Trackers

(Growing and Creating new symbol networks)

Do you want your company to know how fit you are?

By Emily Young
BBC News

17 July 2015 | Business



"I'm a big fan of finding reasons to get up once in a while and walk around a bit," says Blake Menezes.

He works as a social media strategist at the US software firm Autodesk and is taking part in a company-led health challenge.

Staff teams equipped with pedometers are competing to see who can achieve the most steps over 100 days.

"Having that pedometer does illustrate quite clearly how active you are... and it makes you walk," Blake says.

And the benefits are immediate, says colleague Clay Helm, the firm's PR director: "I'm a lot more productive and less stressed. Sometimes your best

Technology of Business

Could Vietnam become the next Silicon Valley?

The tech giving people power to deal with disability

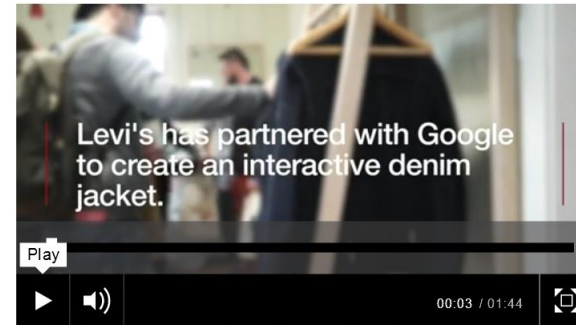
Toilet tech proves that where there's muck there's brass

How blockchain tech could change the way we do business

• Businesses in Taiwan tackles weight

NEWS

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Hands-on with the jacket with Google woven in

14 March 2017 Last updated at 01:00 GMT

A partnership between Levi's and Google has yielded the Jacquard, a denim jacket with technology woven into the fabric.

Once paired to a smartphone via Bluetooth, the jacket allows the wearer to control key functions with just a brush or tap of the cuff. A double tap with two fingers, for example, starts or stops music.

The BBC's North America technology reporter Dave Lee tried it on for size.

Follow Dave Lee on Twitter [@DaveLeeBBC](#)

IBM and Apple want to share how you are with others

By Dan Simmons
Technology reporter

14 April 2015 | Technology



Watson Health tries to make sense of health data from smartphones and fitness trackers

IBM has launched a health unit to make sense of the wealth of data created by the boom in fitness trackers and apps.

Watson Health aims to create "a secure, cloud-based data sharing hub" that can feed analytic technologies, it said.

It could provide diagnoses or health alerts which could also be sent to doctors, carers, or insurers for example, with the user's permission.

IBM has teamed up with Apple and wants to launch "new employee health and wellness management solutions".

The company says it is buying two firms to help with its goal: **Explorys** which has one of the largest healthcare databases in the world and **Phytel** that works with

Technological Norming and Ecological Change

Getting “Chipped”

- [Chip Implants in Sweden](#)

BBC Sign in News Sport Weather Shop Earth Travel Mor

NEWS

Home Video World US & Canada UK Business Tech Science Magazine Enter

Technology

Office puts chips under staff's skin

 **Rory Cellan-Jones**
Technology correspondent

🕒 29 January 2015 | Technology | 📧



Growing & Norming New Media/Symbol Technologies

BodyHack Conference - Austin Texas



The bodyhackers enhancing the human form

Would you add new body parts or change what your limbs were capable of doing, if you were given the choice?

The BBC's Dave Lee visited Austin, Texas to meet the biohackers determined to push the human body - and the law - into new territory.

🕒 08 Feb 2018 | Technology



Share

FILTER BUBBLES EXTENDED

▷ **iOT** → the Internet of Things

- Chip/Wifi enabled “smart objects”

- ☐ Car
- ☐ Tattoo
- ☐ Eye
- ☐ Phone
- ☐ House
- ☐ Refrigerator
- ☐ Thermostat
- ☐ Washer/Dryer
- ☐ Bed

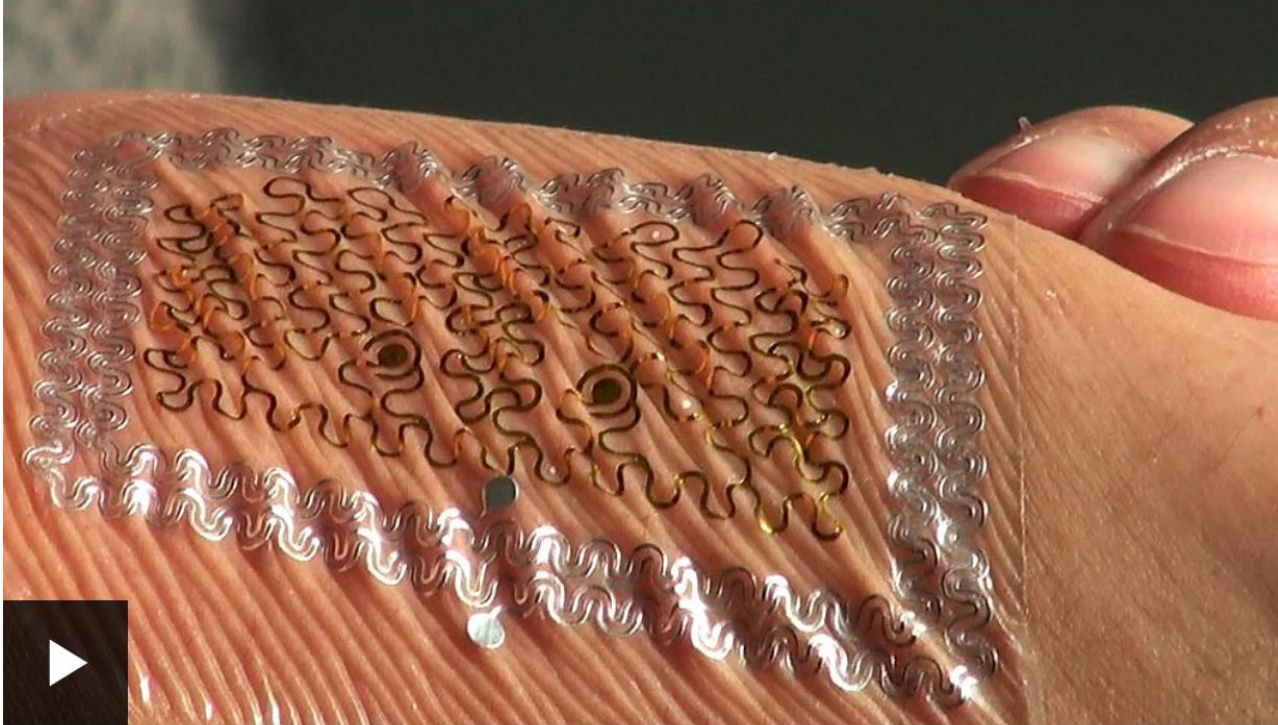
▷ **Beta- Cyborgs** → “BetaBorgs”: Technological Addiction & Dependence

▷ **Full Cyborgs** → Tech inside and connected to human tissue



Growing & Norming New Media/Symbol Technologies

Graphene Tattoo and YOUR Health?



How a graphene tattoo could monitor your health

A graphene-based tattoo that could function as a wearable electronic device to monitor health has been developed at the University of Texas.

Gold is often used in electronic components, but graphene is more conductive, can be hundreds of times thinner and allows the tattoo to wrinkle naturally with skin.

It is hoped that as the cost of graphene falls, such tattoos will become affordable for medical use.

See more at [Click's website](#) and [@BBCClick](#).

🕒 25 Oct 2017

[f](#) [💬](#) [🐦](#) [✉](#) [Share](#)

Growing & Norming New Media/Symbol Technologies

The Bionic Eye

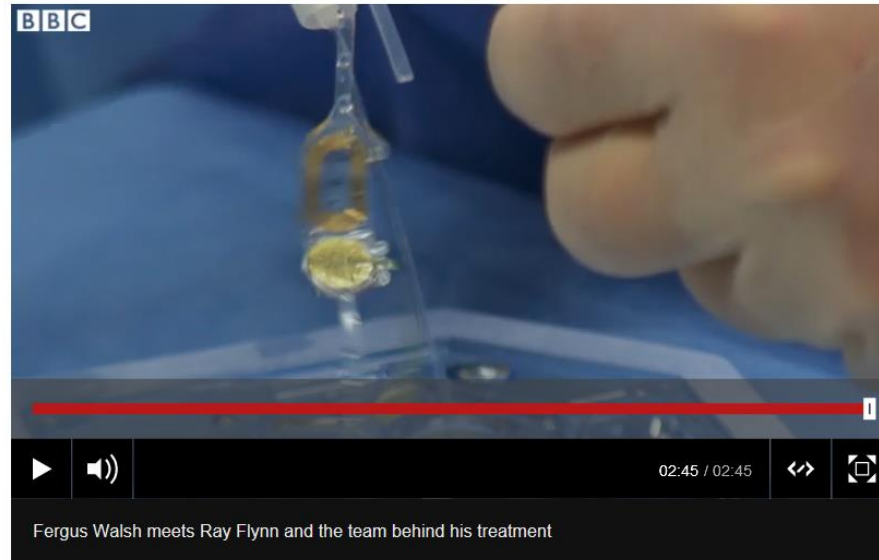
- [Preliminary Bionic Eye](#)

Bionic eye implant world first



Fergus Walsh
Medical correspondent

🕒 21 July 2015 | Health | 📄



Surgeons in Manchester have performed the first bionic eye implant in a patient with the most common cause of sight loss in the developed world.

Ray Flynn, 80, has dry age-related macular degeneration which has led to the total loss of his central vision.

He is using a retinal implant which converts video images from a miniature video camera worn on his glasses.

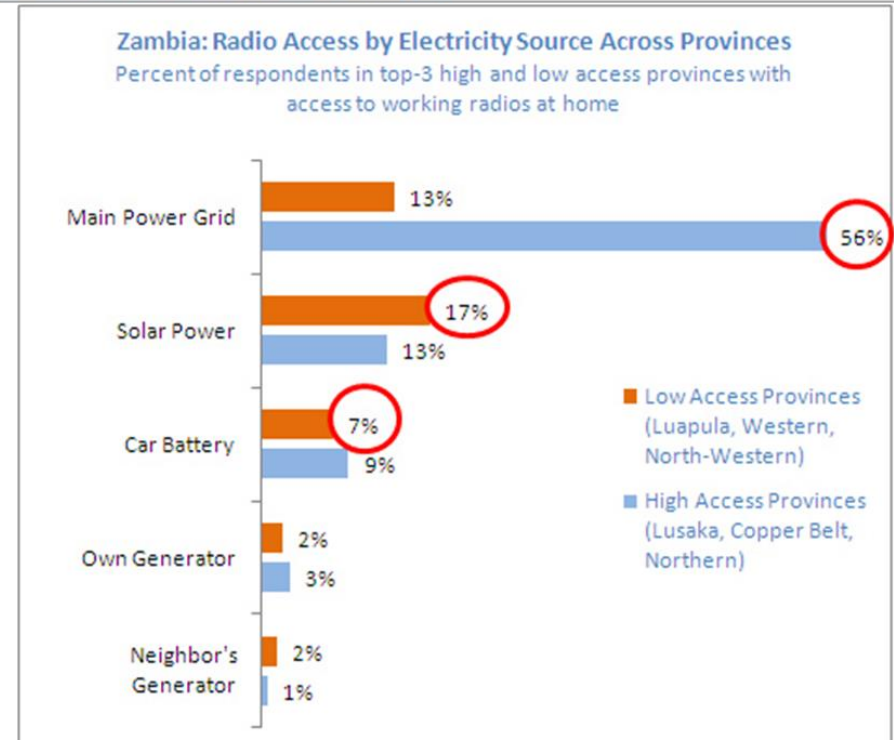
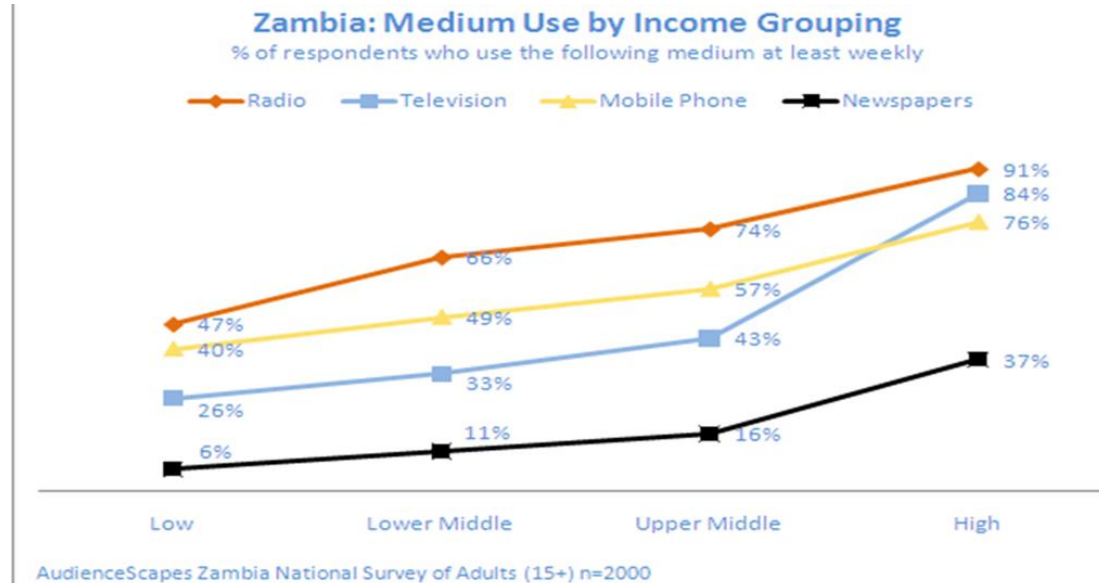
He can now make out the direction of white lines on a computer screen using the retinal implant.

Mr Flynn said he was "delighted" with the implant and hoped in time it would

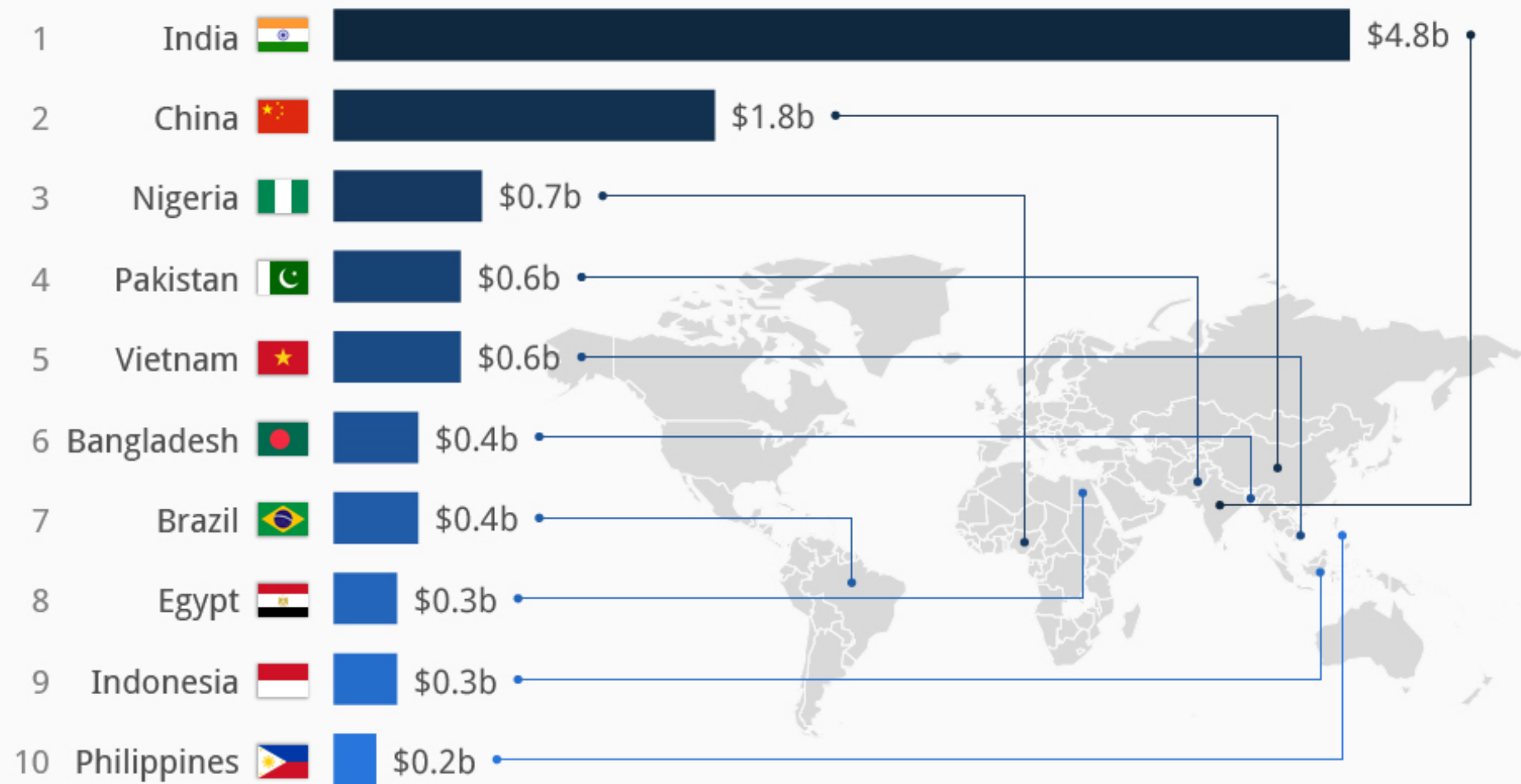
Key Idea: Dominant Media TECHNOLOGIES (DMTs) within a Society

Every culture, nation, or empire relies upon a small set of **DOMINANT MEDIA Techniques** and/or **INFORMATION TECHNOLOGIES (DMTs)** through which essential elements of information are communicated to that culture.

- ✓ The **Dominant Media/Information TECHNOLOGY (DMT)** = Is one that the **MAJORITY** of mainstream people in a society uses and/or **relies upon** regularly to stay "**CONNECTED**" to their culture.
- ✓ The **DMT** is the media source that the **MAJOR messages** (political, economic, social) must conform to in order to reach a critical portion of a society's mass audience.
- ✓ The DMTs are the **MAJOR** culture **PRODUCERS** in a society. (Identity, Knowledge, Fashion, Politics, etc.)
- ✓ **Cultural/Political/Economic POWER**. Those who control and/or best manipulate a DMT are the groups which control **informational power** in a society.
- ✓ The **DMT** can **vary widely** between cultures (Japan vs. Mali) and **within** cultures (Urban vs. Rural).
- ✓ **Competition vs. Change**-There is a constant **competition between media** forms going on all of the time in every society over which will deliver important information to the masses. However, the DMT in a culture does NOT shift very quickly.



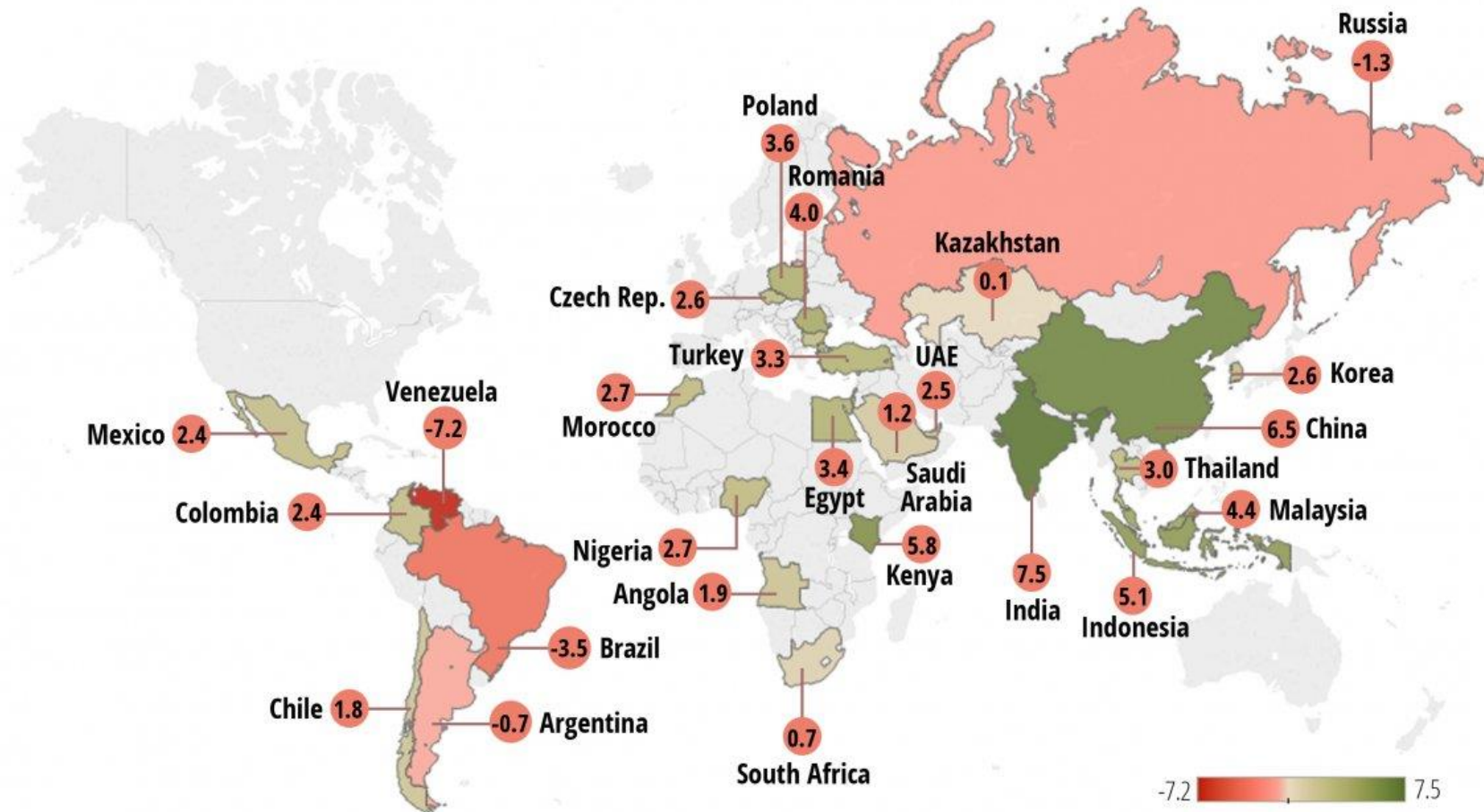
Global Media Tech Growth



Emerging Markets

EMERGING MARKETS OUTLOOK 2016

GDP growth rates of emerging economies this year are projected to be no higher than in 2015



Netflix & Amazon Global TV Dominance

Netflix to raise another \$8bn to finance new films and shows for next year¶

23 October 2017-BBC¶



Netflix's Stranger Things has been one of the company's big hits ¶

Netflix is raising another \$1.6bn (£1.2bn) from investors to finance new shows and possibly make acquisitions. ¶

The video streaming service plans to spend up to \$8bn on content next year to compete with fast-growing rivals. ¶

Netflix will issue bonds to investors, although the interest rate it will pay has yet to be decided, the company said in a statement. ¶

Netflix plans to release 80 films next year, but some analysts are wary about its cash burn and debt interest costs. ¶

The company's latest debt fundraising is its largest so far, and the fourth time in three years it has raised more than \$1bn by issuing bonds. ¶

Earlier this month, Netflix said it would raise prices in countries including the UK and US for

Some critics say it is a contender for the Academy Awards and would be the first Netflix feature to be in the Oscars race. ¶

Netflix's share price has risen more than 50% this year on the back of subscriber growth that has beat expectations. The company now has more than 109 million subscribers globally, adding 15.5 million so far this year. ¶

The move to take on more corporate debt comes amid expectations that borrowing costs may increase in coming months. The US Federal Reserve is weighing another rate hike by the end of 2017. ¶

Only 8% of college students don't have Netflix, and that's a great sign for the company's future¶

Nathan Malone
Apr. 7, 2017, 11:29 AM¶

The vast majority of college students have access to Netflix, even if they don't have their own account, and that bodes well for the future of the streaming juggernaut. ¶

In a new survey of US college students, commissioned by LendEDU, only 8% of respondents said they didn't have a Netflix account. That means that a whopping 92% have Netflix. That stat jives with recent research on US teens by Piper Jaffray, which found that 37% of them watch Netflix every day. Significantly, Netflix's big competitors, Amazon Prime Video and Hulu, came in way below Netflix at just 3% each for daily viewing. ¶

This all doesn't mean young people actually pay for Netflix, however. 54% of college respondents to LendEDU's study said they use a friend's or family member's account, and 5% said they used an account owned by their significant other or ex. ¶

Only 34% said they had their own account. But that might not be such a big deal for Netflix, which has always taken a hands-off approach to

Amazon will spend about \$4.5-BILLION on its fight against Netflix this year, according to JPMorgan¶

Nathan Malone
Apr. 7, 2017, 2:48 PM¶

Amazon is set to spend a gargantuan ~\$4.5 billion on video in 2017, according to analysts at JPMorgan, a figure that would put the internet giant much closer to rival Netflix than many industry observers thought. ¶

In July, Amazon CFO Brian Olsavsky said Amazon would "nearly double" its investment in video, while "tripling" its amount of original content in Prime Video, over the remainder of 2016. This new estimate from JPMorgan on the 2017 budget suggests that spending will continue to blast upward. ¶

Even so, Amazon would still sit below Netflix's \$6-billion content budget for 2017. But \$4.5 billion would make Amazon a major, major player in the market. For reference, HBO spent around \$2 billion on programming in 2016, and while Time Warner CEO Jeff Bewkes said that budget would rise a bit this year, he characterized the 2017 HBO programming budget as a "couple of billion dollars" in December. ¶

¶

"It's actually efficient and good economics," Price said of "The Grand Tour." ¶

But Amazon isn't only focused on shows. Amazon and the NFL recently struck a \$50-million deal for Amazon to stream 10 Thursday-night games, according to The Wall Street Journal. This is a similar deal to the one the NFL had with Twitter last year, except about five times larger for the same number of games. These games will only be available as part of Amazon Prime Video, and the general public won't be able to watch. ¶

"We're focused on bringing our customers what they want to watch, Prime members want the NFL," Amazon SVP Jeff Blackburn told the Journal. ¶

If this NFL deal proves a success, it could embolden Amazon to further go after the cable and satellite TV industry, which has seen competition from streaming TV packages. YouTube, Hulu, AT&T, and others have recently jumped into market, and Amazon has long been rumored to be working on its own. ¶

Netflix in 190 Countries! ???

CES 2016: Netflix extends its service to almost all the world

By Leo Kellon
Technology desk editor

🕒 6 January 2016 | Technology



Netflix has gone live in nearly every country in the world.

The firm announced it had switched on its service in 130 additional countries.

It said it was still trying to expand to China. The other exceptions are North Korea, Syria and Crimea, where it is banned from operating by US law.

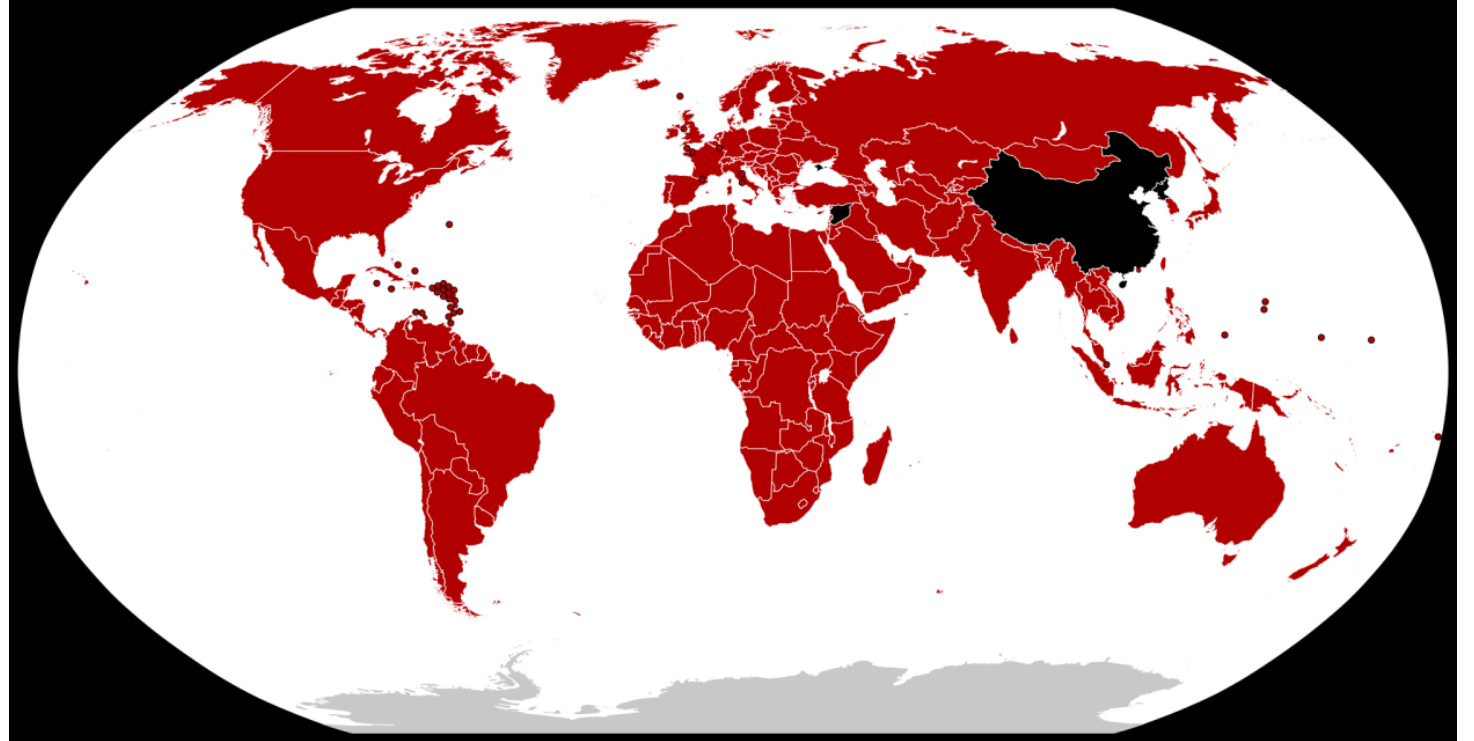
The announcement was made by the firm's chief executive Reed Hastings at his keynote speech at the CES tech show in Las Vegas.

He also confirmed that Netflix would begin offering HDR (high dynamic range) content later this year.

The company's shares closed the day more than 9% higher.

"We were expecting Netflix to go everywhere, but this has happened more quickly than we thought," commented Fernando Elizalde from the tech consultancy Gartner.

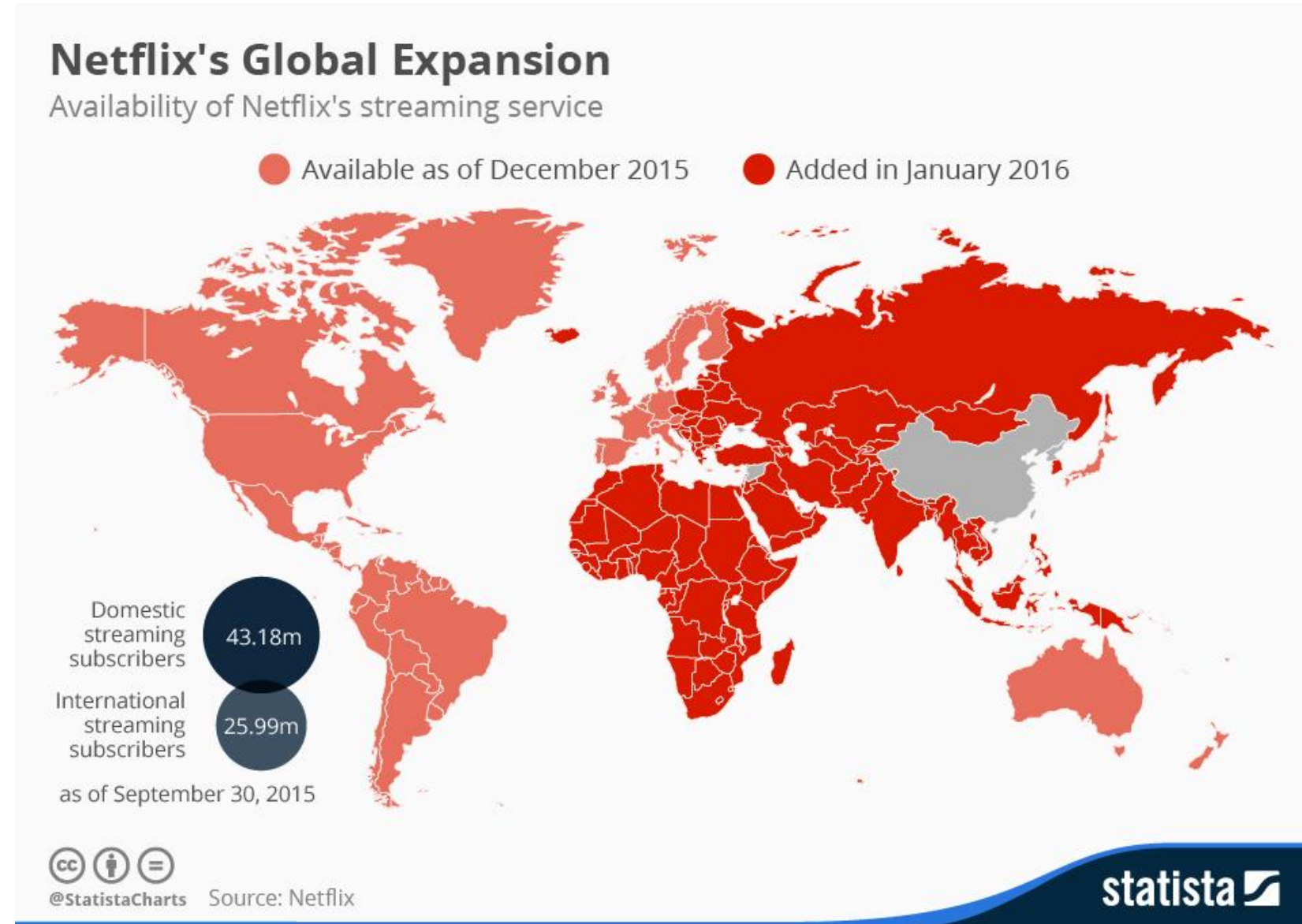
"Until now, the firm had been doing it in phased stages because of the costs of marketing and dubbing or subtitling the content.



Netflix Goes Global

- **2015/16/17** NETFLIX becomes “available” WORLDWIDE!

- ▷ The FIRST LEGITIMATE **GLOBAL** TV PROVIDER
- ▷ “Available” in 190 countries (not China, Syria)
- ▷ Streaming **BANDWIDTH**
- ▷ Mostly **Cities** and **wealthy** urban areas
- ▷ Tourist Centers and Hotel Districts



Most Popular Shows on Netflix Worldwide

Seven shows are the most popular in five countries or more.

Netflix has a lot of global heavy hitters in its show lineup, with seven programs topping the list of favorites in at least five countries.

3% → Most Popular in 8 Countries

***My Love from the Star* → Most Popular in 7 Countries**

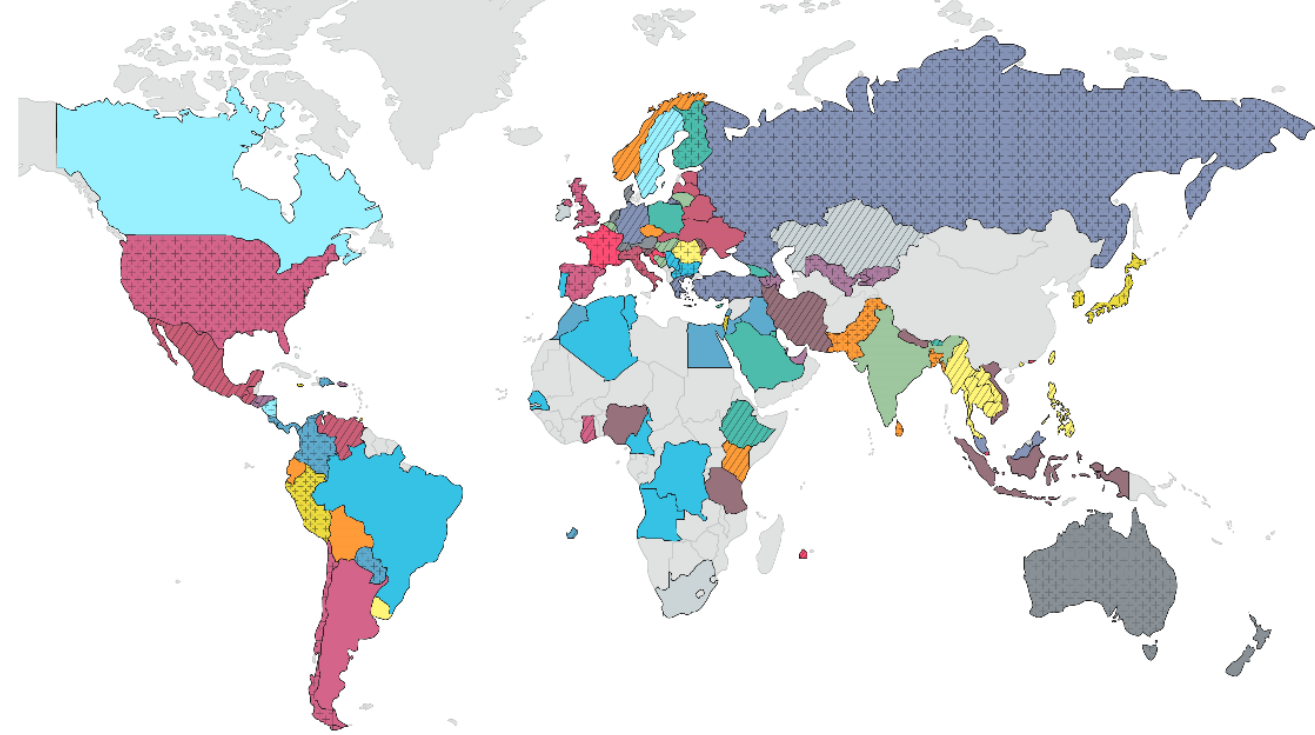
***13 Reasons Why* → Most Popular in 5 Countries**

***Bones* → Most Popular in 5 Countries**

***Boys Over Flowers* → Most Popular in 5 Countries**

***Breaking Bad* → Most Popular in 5 Countries**

***Sense8* → Most Popular in 5 Countries**



Global/INTERNATIONAL VIEWERS

The HUNT for New International Viewers!

MAJOR New GLOBAL Markets:

- ? New Audiences
- ? New languages
- ? Cultural Stories
- ? Actors
- ? Locations
- ? TECH REQUIREMENTS
- ? COSTS
- ? COMPETING PROVIDERS?

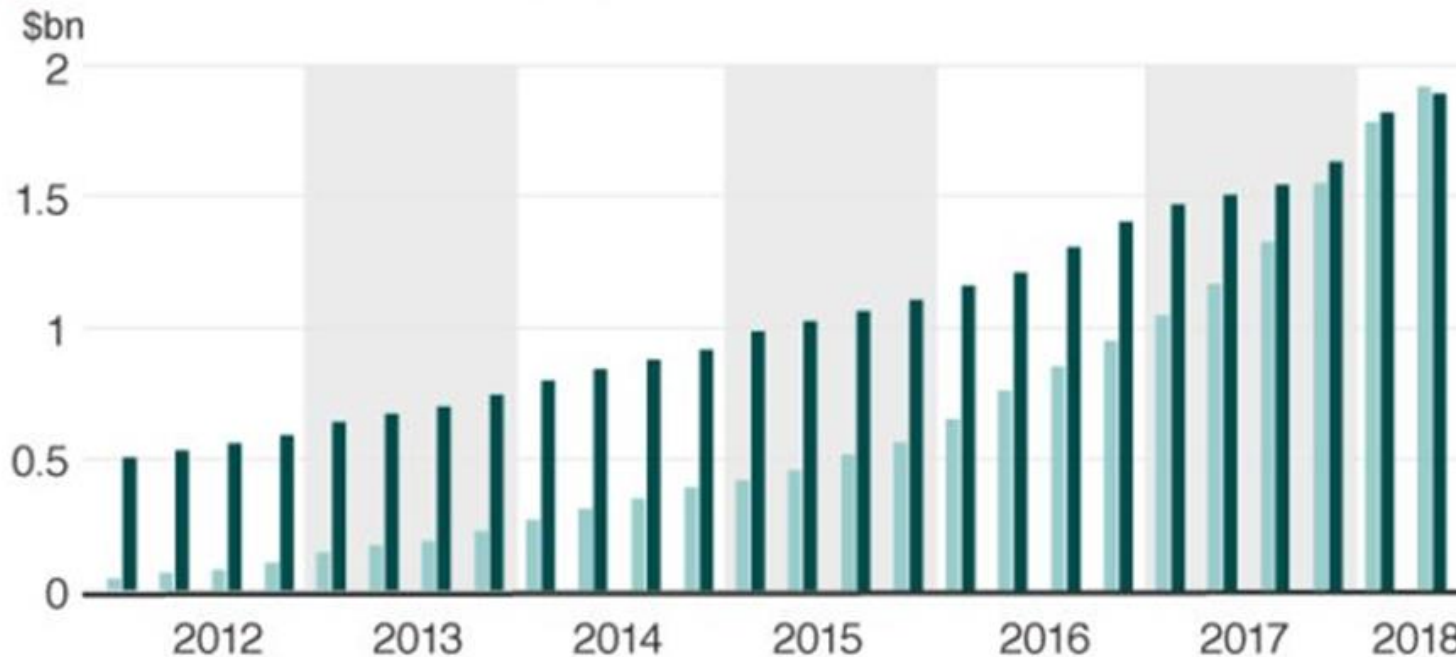


Netflix international streaming power

Revenue by quarter

■ US streaming

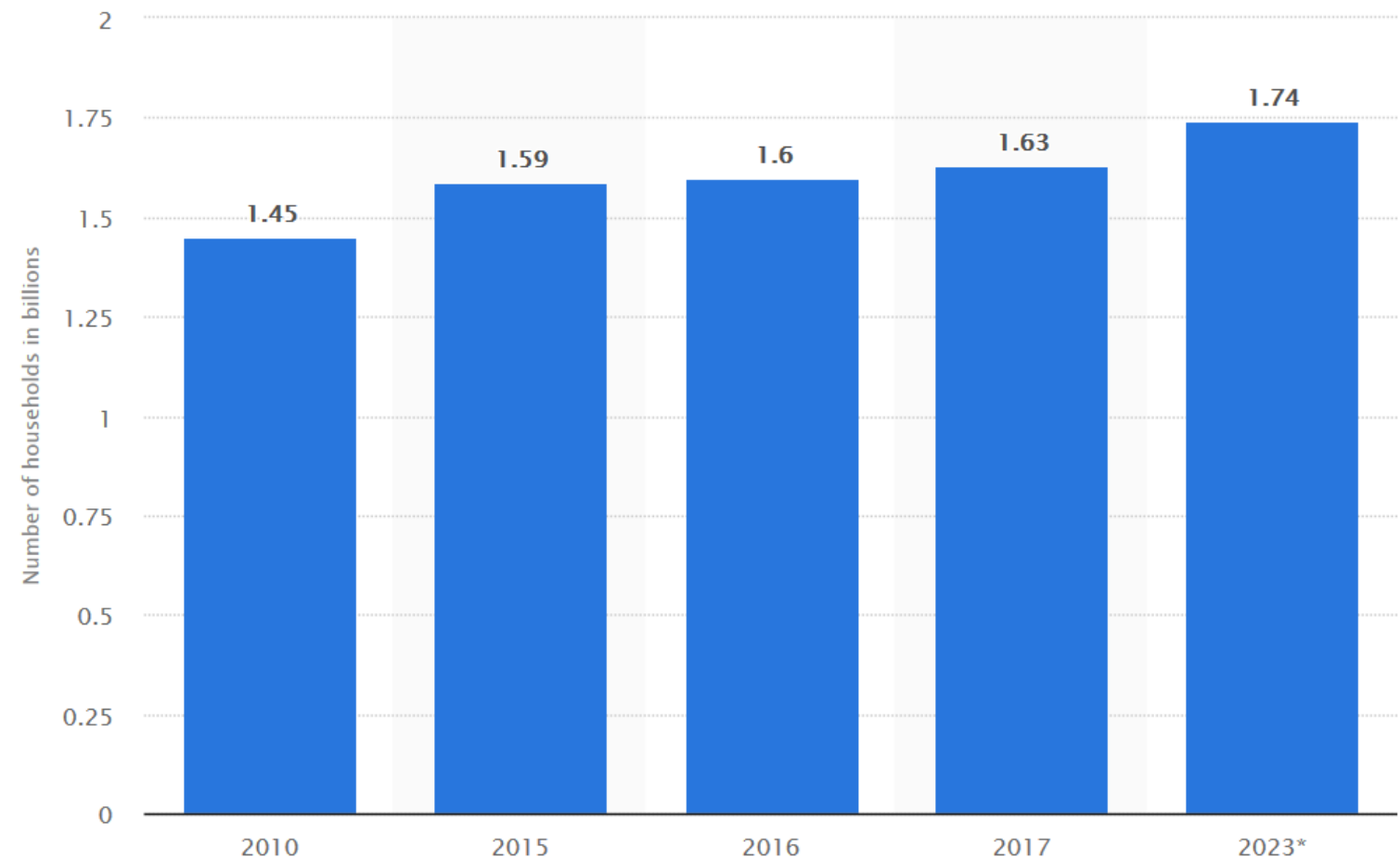
■ International streaming



Source: Netflix

BBC

Number of TV households worldwide from 2010 to 2023 (in billions)



DOWNLOAD **SETTING**



PNG



PDF

CITATION [\(FAQ\)](#)

Select citation

DESCRIPTION **SOURCE**

The timeline presents households worldwide in 2017, as well as a forecast projected the number in 2023, up from 1.63 billion in 2017. In 2017, there were 119.6 million TV households in the United States. [States](#) in the 2017 to 2023 period.

Netflix & YouTube

Global Bandwidth Use

- Netflix = **15%** of ALL global internet Traffic!
- YouTube = **11.4%** of ALL global internet Traffic!
- All other web browsing = **7.8%**

Technology

Netflix viewing eats up world's data

By Jane Wakefield
Technology reporter

🕒 4 October 2018 | 💬 98

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Video streaming service Netflix is the world's most data-hungry application, consuming 15% of global net traffic, according to research from bandwidth management company Sandvine.

Video in general accounts for more than half of net traffic, it suggests.

Other media streaming such as embedded video on websites accounts for 13.1%, YouTube, 11.4% and web browsing, 7.8%.

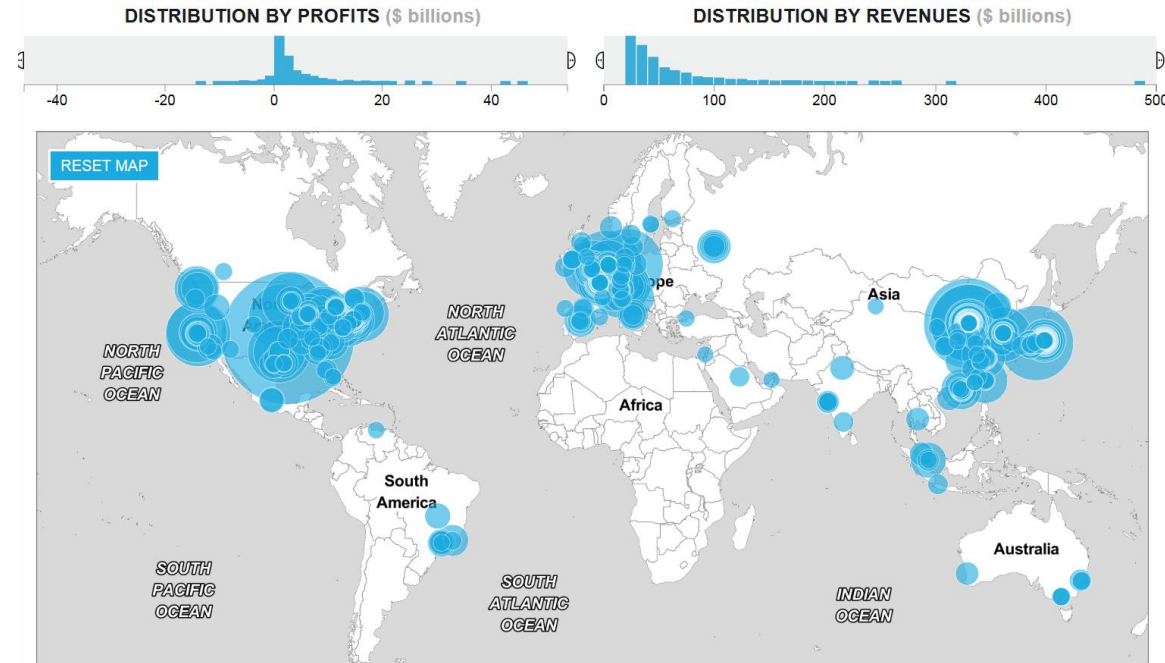
The report also found that gaming and file-sharing are becoming a significant force in traffic volume.

Innis Key Idea: Knowledge MONOPOLIES

- Every culture or nation develops an elite set of **KNOWLEDGE MONOPOLIES** which have **TREMENDOUS POWER** over **ALL information flows**, technology development/adoption, and **CULTURE EVOLUTION**.
 - **Knowledge Monopolies** = Usually a small group of people who have harnessed the **SKILLS** and have the **ECONOMIC clout** necessary to use and gain **EXCLUSIVE CONTROL** over the development and evolution of a society's dominant communication or information technologies/systems.
 - **Agenda Setting**: Those knowledge monopolies continually try to shape at least three areas in your life:
 - What you do with your time! How you think about time.
 - Your **prioritization** of self, society, and others.
 - What kinds of information you do **or don't** receive (filters), and
 - **EPISTEMOLOGICAL**. HOW you think about events, people, places, LIFE itself.
 - **Culture Creators/Shapers**: Knowledge Monopolies are the primary creators and communicators of culture as a “product.” They tell us about what our culture is and then sell us the products/ideas associated with that cultural notion.
 - **CURRENT KNOWLEDGE MONOPOLIES?**

Mapping the Global 500

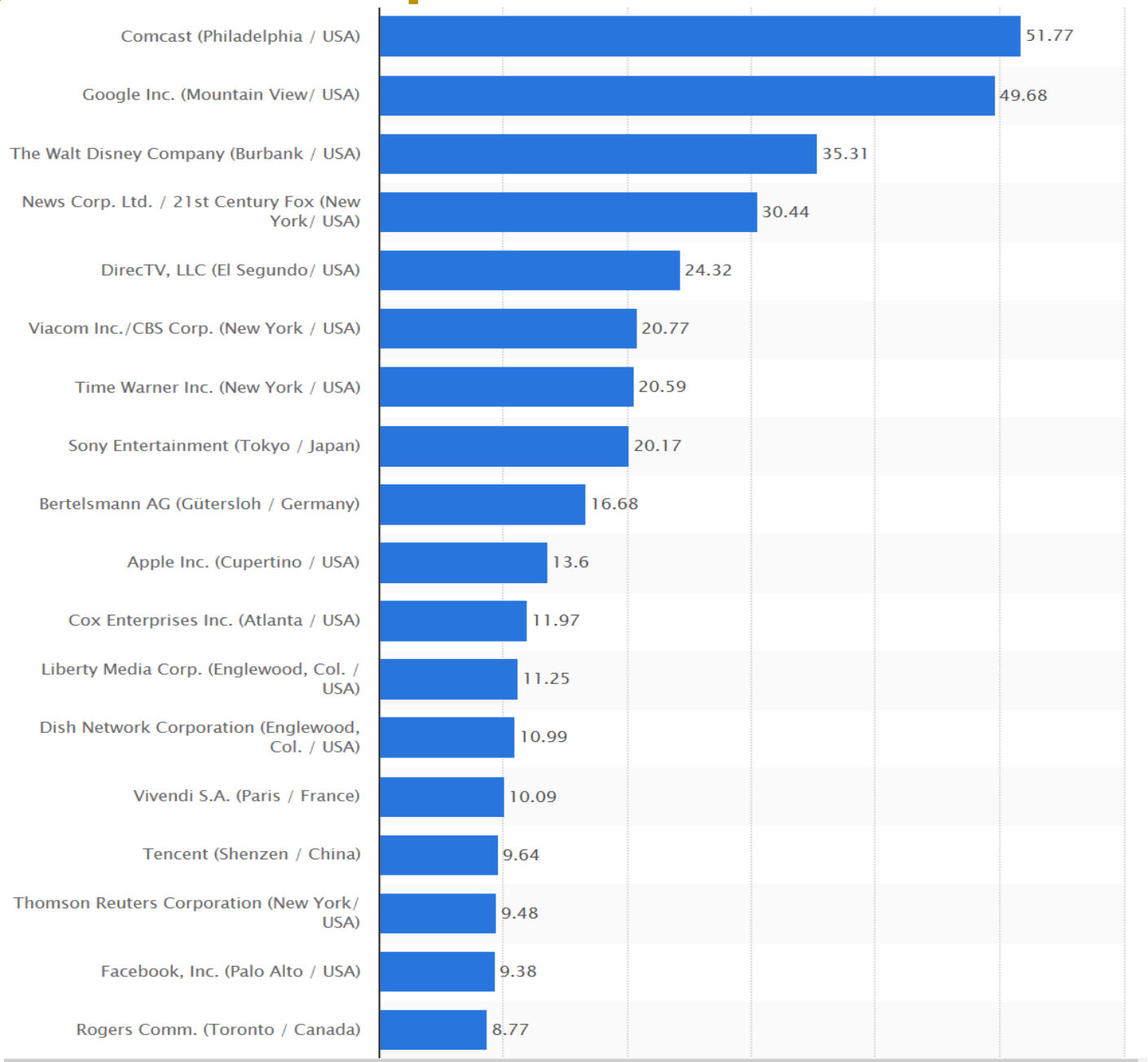
Each circle on the map points to the location of a company headquarters; and the circle's size represents company revenue. Zoom in by double-clicking on the map to explore company locations and hover over the circles for more information.



500 COMPANIES DISPLAYED

Map tiles by Stamen - Design by Nicolas Rapp for Fortune

Worlds Largest Media Corporations

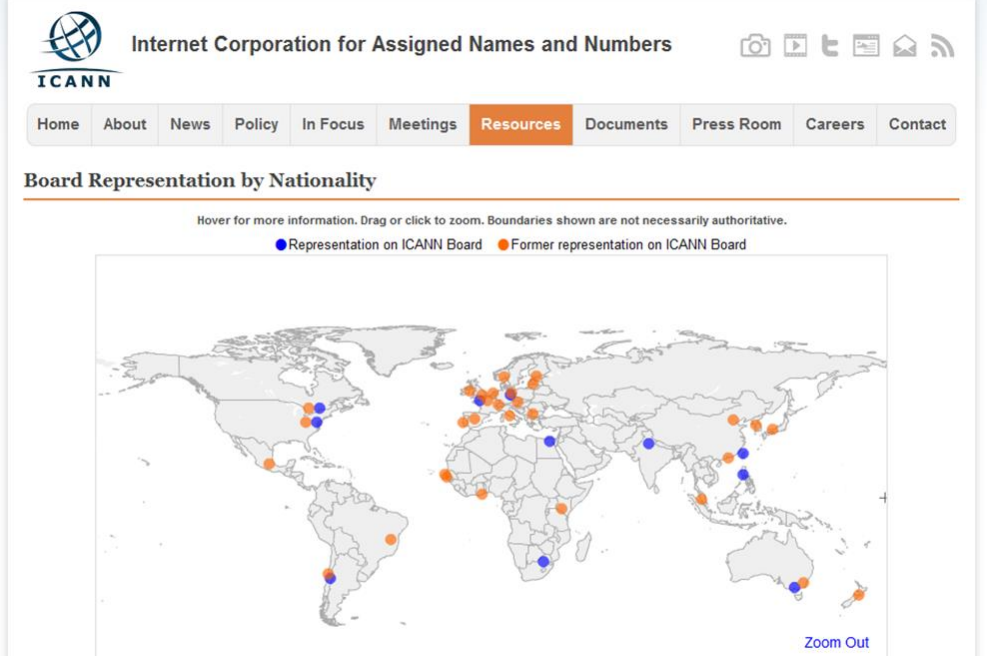


Who Runs the Internet Anyway?

(And why it is NOT culturally neutral)

1. **The Internet Corporation for Assigned Names and Numbers (ICANN):** A **private** nonprofit corporation in Marina del Rey, California. It took over the management of the internet from the U.S. Government (DoD) in 1998. **ICANN** manages the Internet's **Domain Name System (DNS)** and correct **IP addresses**.
2. **U.S. Dept of Commerce (DOC)** gives ICANN the limited right to make policy for the internet.
3. **The Internet Engineering Task Force (IETF):** An international organization with an open membership policy that has several **working groups**. Each working group concentrates on a specific topic, such as Internet security. Collectively, these working groups try to maintain the Internet's architecture and stability.
4. **The Internet Architecture Board (IAB):** An IETF committee, the IAB's mission is to oversee the design of Internet protocols and standards.
5. **Upstream internet providers:** •UUNETLevel 3, Verizon, AT&T, qwest, Sprint, IBM

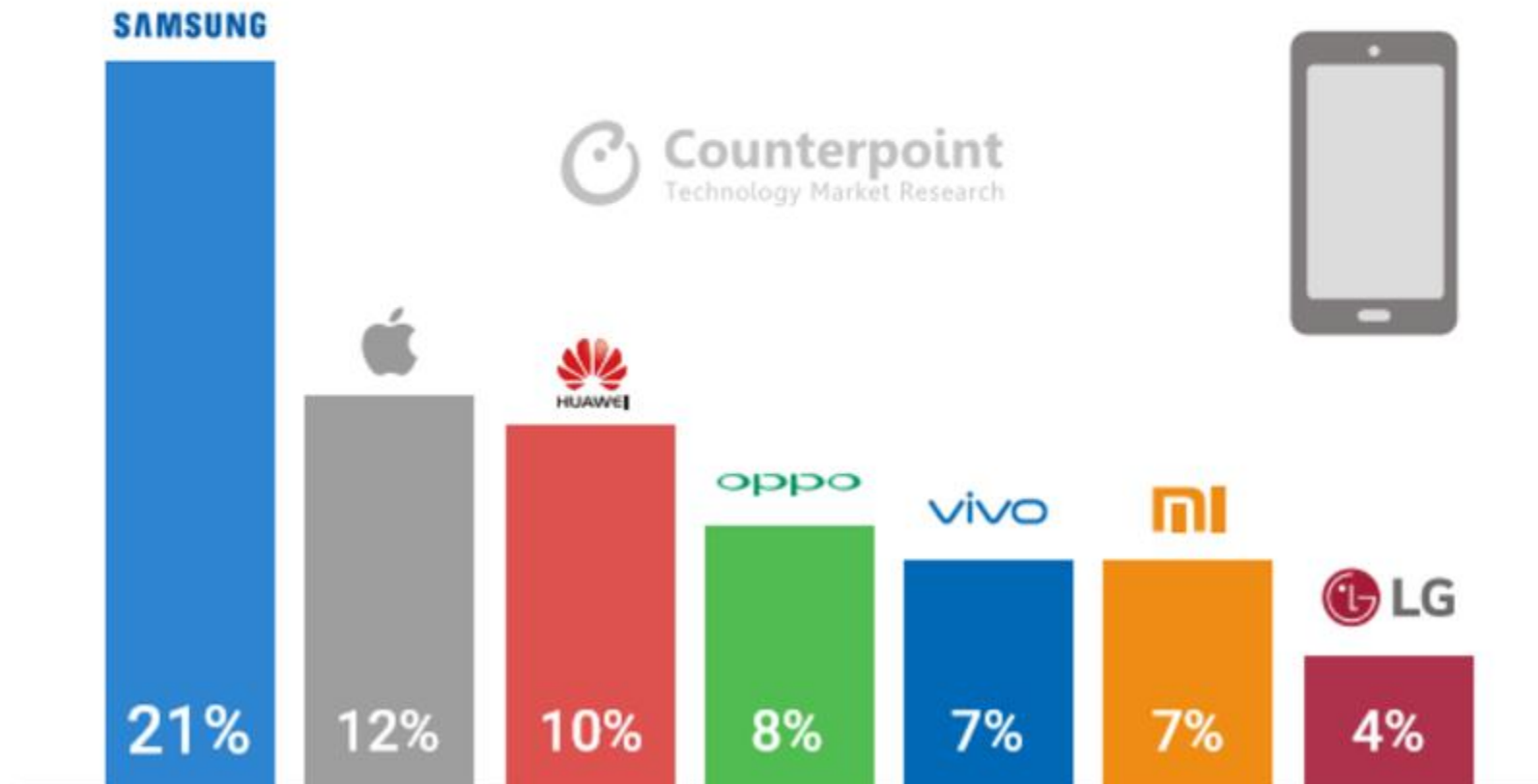
ICANN Board Members:
<http://www.icann.org/en/general/board.html>



Global Smartphone Market

Global Smartphone Shipments Market Share Q3 2017

Samsung –Korean
Apple- U.S.
Huawei- Chinese
Oppo-Chinese
Vivo-Chinese
Xiaomi-Chinese
LG-South Korea



Computers

- Only 7 Computer manufacturers make 95% of ALL the world's computers.
- FoxConn Electronics #1
- Quanta (Taiwan) 33% of all laptops Apple Inc., Compaq, Dell, Gateway, Hewlett-Packard,[2] Alienware, Amazon.com, Casper[disambiguation needed], Cisco, Fujitsu, Gericom, Lenovo, LG, Maxdata, MPC, Research In Motion, Sharp Corporation, Siemens AG, Sony, Sun Microsystems, Toshiba, and Vizio



Facebook + Google

Facebook invents new unit of time called a flick

🕒 23 January 2018

[f](#) [t](#) [m](#) [e](#) [Share](#)



The flick is the next unit of time up from a nanosecond

A Facebook engineer has invented a new unit of time called a flick.

The flick has been designed to help developers keep video effects in sync, **according to a description** on the code-sharing site GitHub.

A flick, derived from "frame-tick", is 1/705,600,000 of a second - the next unit of time after a nanosecond

The four companies that shape our lives

Apple, Amazon, Facebook and Google: these four companies enormously influence our lives. Is that good or bad?



8 December 2017

The four most important tech companies aren't even just tech companies anymore. They each have embedded themselves in our lives, hugely influencing us by playing to our basic human instincts: from the eternal human search for answers to our need for love.

That's what Scott Galloway, professor of marketing at New York University, argues in his new book, *The Four: The Hidden DNA of Amazon, Apple, Facebook, and Google*.

He also says that the companies' deep pockets and massive customer base are what allow the companies to start competing in different sectors and industries – like how Amazon is now producing original TV content, or how Facebook has more or less emerged as a news media platform. That has prompted scepticism

Facebook and Google criticised by George Soros

By Joe Miller
BBC News, Davos

🕒 25 January 2018

[f](#) [t](#) [m](#) [e](#) [Share](#)

Davos 2018



The billionaire investor George Soros has criticised tech "monopolies" such as Facebook and Google, calling them a threat to democracy.

At his annual dinner at the World Economic Forum in Davos, Mr Soros warned that social media platforms were "obstacles to innovation".

He raised concerns about their power to shape people's attentions.

However, he predicted their days were numbered because tax policy and regulation would catch up with them.

Mr Soros also called the Trump administration a "danger to the world", adding that he believed the president would be gone by 2020 "or sooner".

'Lost freedom'

But the outspoken financier reserved his strongest criticism for what he called the "unprecedented and transformative" effects of large internet firms.

"The power to shape people's attention is increasingly concentrated in the hands of a few companies," Mr Soros told assembled guests.

Referencing Google and Facebook several times during his speech, he said: "It takes a real effort to assert and defend what John Stuart Mill called 'the freedom of mind'.

"There is a possibility that once lost, people who grow up in the digital age will have difficulty in regaining it."

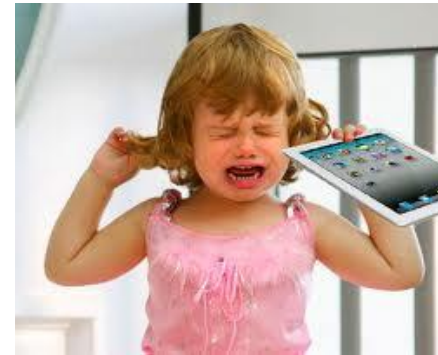
• More from Davos on the BBC

He cautioned that this would have "far-reaching political consequences", and had already played a large role in the election of Donald Trump.

Facebook declined to comment, while Google did not immediately return a request for comment.

Key Idea: The inherent "BIAS" of an information technology (Its MEDIA BIAS)

- Every information technology has an '**inherent**' **bias** in how or what it communicates. That is, the technology itself is PREDISPOSED to be used to communicate only certain kinds of information in certain ways.
- Important Question: What is it BEST at communicating? And HOW? (Specific types of content? Ideas? Personalities? Types of stories?, etc.)
- How is it **easily**, **habitually**, and **routinely** used (and by **WHOM**)?
- This is based on...
 - Sensory Focus: Whether it is Image, Audio, Text centered
 - REQUIREMENTS for ACCESS: \$\$, Location, Education, Other technologies/skills...
 - The **range of SKILLS** (intellectual, physical, perceptual) it requires to use it and **create** and **comprehend** (understand) information carried by it
 - Types of thoughts/ideas it will easily/efficiently communicate
 - Speed, volume, efficiency of its communication
 - Its **economic, political, social, or technological REQUIREMENTS**
- Examples– Texting, Twitter, iPad Education
- WORLD TEXTING CHAMPIONSHIPS



Map of international phone calls

- # NETFLIX
- Expands to 190 Countries
Around the World
- REGIONS WHERE NETFLIX IS AVAILABLE
- 
- A world map with a red border. The map shows the continents of North America, South America, Africa, Europe, Asia, and Australia. Most landmasses are colored red, indicating where Netflix is available. China is colored grey, indicating it is not available there. The map is titled 'REGIONS WHERE NETFLIX IS AVAILABLE' in a small, black, sans-serif font.



Innis' Fears -- Generalizing his historical ideas to "modern" society.

→ **Major Historical Trend #1:** Modern society has become **technologically obsessed** and reliant upon technologies to communicate to such a degree that we are becoming increasingly **Technologically Determined**. We equate human progress with Technological Progress. ([chat bots article](#))

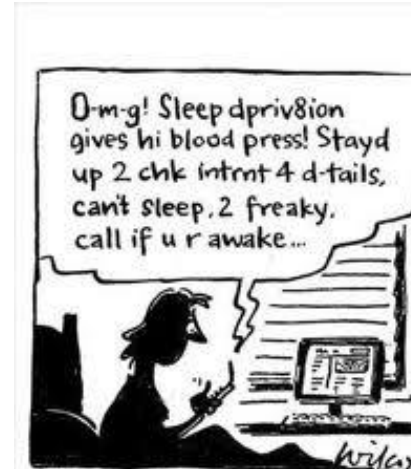


→ **Major Historical Trend #2:** Modern civilizations have increasingly developed and have become **addicted to** more and more **SPACE-BIASED MEDIA**.

- With these space biased media, nearly all of our CULTURAL VALUES have changed accordingly--with **SPEED of communication** over QUALITY of communication, and **EFFICIENCY** over depth or meaning.



→ **Major Historical Trend #3:** **Myth of the Information Revolution** (Speed, Efficiency, and Volume over Quality of communication) --We tend to concentrate on how much information (Volume) we get **RATHER** than whether it is meaningful, useful, or QUALITY information which will help us make a difference in how we can act/interact with others.



Global Repercussions!

MAJOR Take Home Points: Innis

1. Lack of **"organic"** face-to-face interaction which is more biologically and psychologically meaningful for humans AND Increasing disparity between **Techno-haves** and **Techno-have NOTs**.
2. Lack of **QUALITY** communication → The MYTH of the Information Revolution
 - a. **Quality** = Information which stimulates new wisdom and can help a person/community and stimulate UNDERSTANDING and EMPOWERMENT
 - b. MORE INFO → INFO OVERLOAD → **INFORMATION GARBAGE!**
 - c. SPEED-EFFICIENCY-CONVENIENCE is NOT QUALITY INFORMATION
3. Lack of a communication **"Common ground"** and binding narratives → Cultural Backlash (violent?)

