"FAKE NEWS" AND BOTNETS AS A CYBERSECURITY CHALLENGE

CLAUDIA NICOLAE – AGERPRES DIRECTOR GENERAL

CyberTalks 8

AGERPRES

AGENDA

1. INTRODUCTION – The Global Context of the Health Crisis

2. MEDIA CONSUMPTION – Stats across generations

3. DISINFORMATION or "FAKE NEW" – Source, Spread and Challenges

4. WHAT'S NEXT – Microtargeting and Propagation

5. AGERPRES – Measures for awareness and education in cybersecurity

INTRODUCTION

- The 2020 health crisis has determined a deep shift within the global context, highlighting the impact of the **digitization** and the substantial need for technology-related adherence to each and every sector of the media.

- With the **ICT integration**, the networks of people across the globe became consistently more interconnected, and able to **share and spread all sorts of information online**.

- Moreover, the human capital, as an economic resource, confirms the new scenario as an independent entity, autonomous, interactive, value and quality focused.

"FAKE NEWS" AND SOCIAL MEDIA

Disinformation

- "Fake news" publishers make a huge social impact as well as large profits through the spread of disinformation

- The spread is compounded by our very human natures which compel us to engage with inflammatory content and often share before we've had time to fact-check and verify.

- The spread of disinformation is problematic: it can impact a brands image, spread harmful or misleading medical information - as we've seen throughout COVID-19, or even undermine democracy itself.
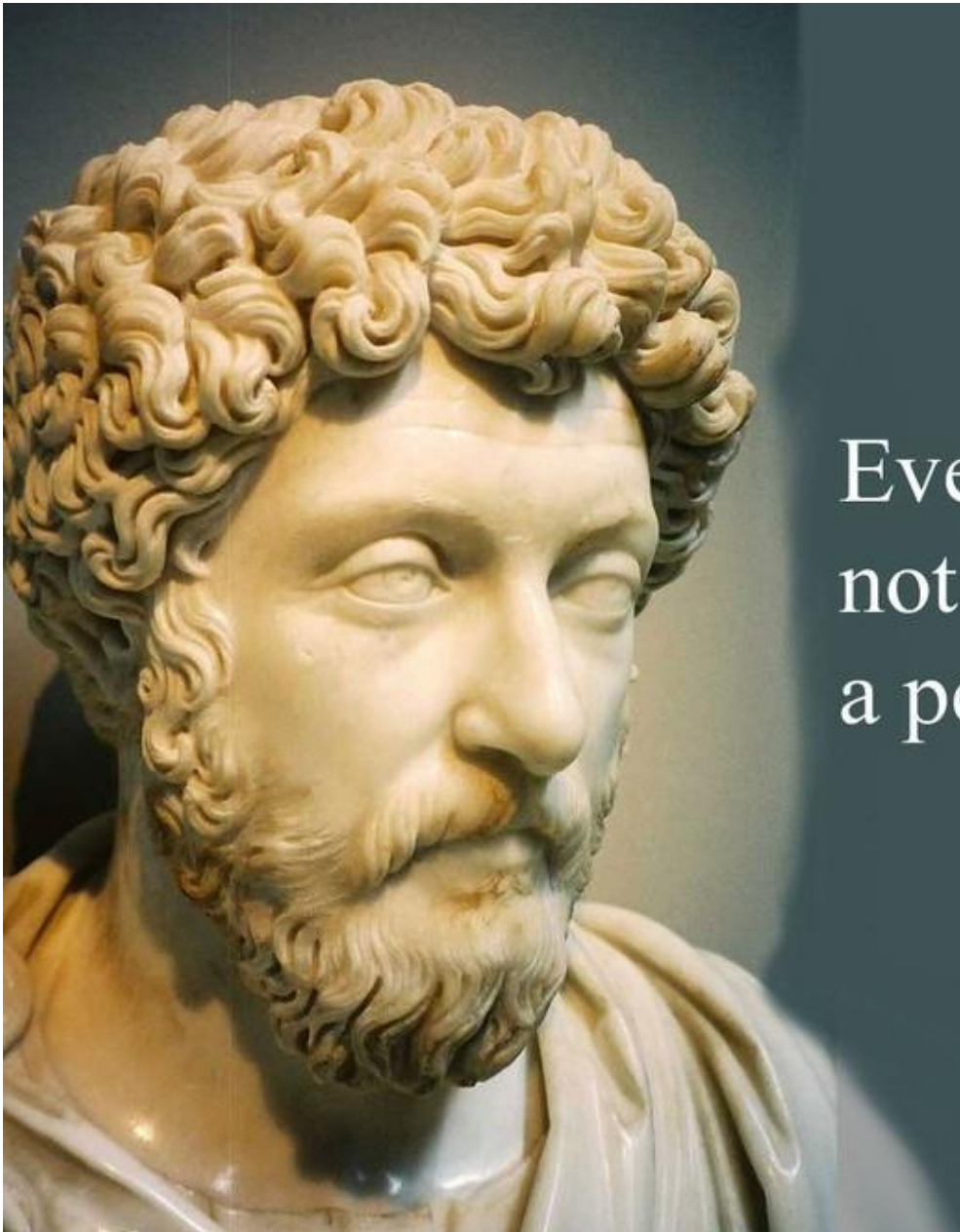
Everything we hear is an opinion, not a fact. Everything we see is a perspective, not the truth.
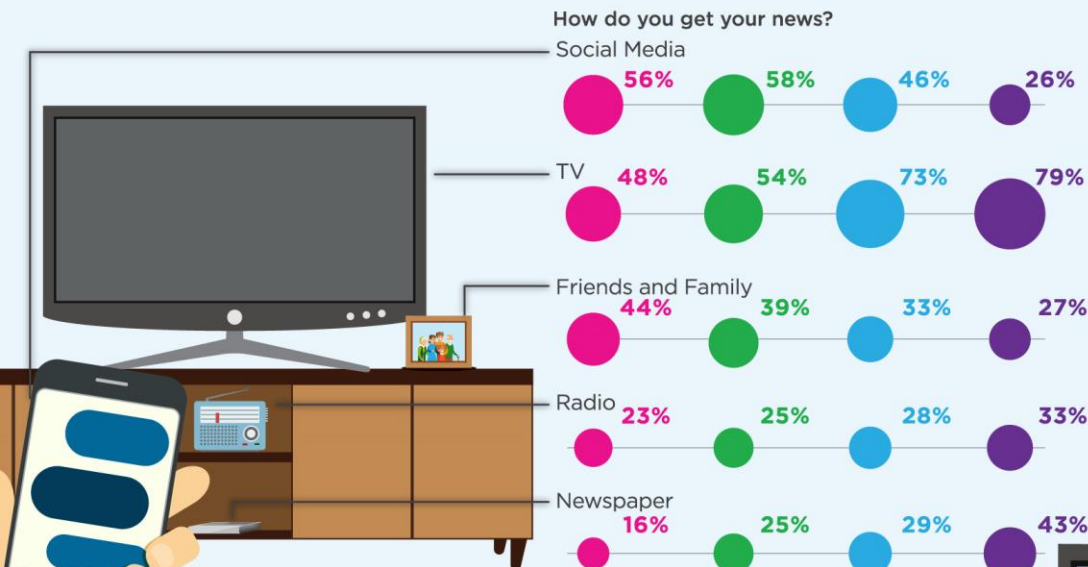
Marcus Aurelius

MEDIA CONSUMPTION

STATS ACROSS GENERATIONS

MEDIA CONSUMPTION ACROSS THE GENERATIONS

lab42 — Market Research. Smarter.

● GenZ   ● Millennial   ● GenX   ● Baby Boomer

NEWS AND CURRENT EVENTS

How do you get your news?

Social Media
| GenZ 56% | Millennial 58% | GenX 46% | Baby Boomer 26% |

TV
| 48% | 54% | 73% | 79% |

Friends and Family
| 44% | 39% | 33% | 27% |

Radio
| 23% | 25% | 28% | 33% |

Newspaper
| 16% | 25% | 29% | 43% |

THE CHANGING LANDSCAPE OF SOCIAL MEDIA USAGE

GenZ is leading the adoption of newer social media channels, compared to previous generations. While Facebook remains the most widely used media across the previous generations, GenZ'ers are using Instagram and Snapchat significantly more than older generations.
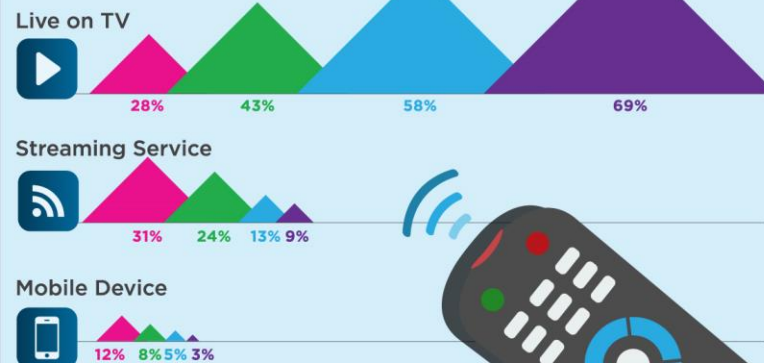
YouTube: 75% / 67% / 61% / 43%
Facebook: 74% / 86% / 88% / 83%
Instagram: 62% / 47% / 33% / 14%
Snapchat: 59% / 29% / 13% / 3%
Twitter: 43% / 47% / 44% / 32%

MOBILE APPS — WHAT'S ON YOUR SMARTPHONE?

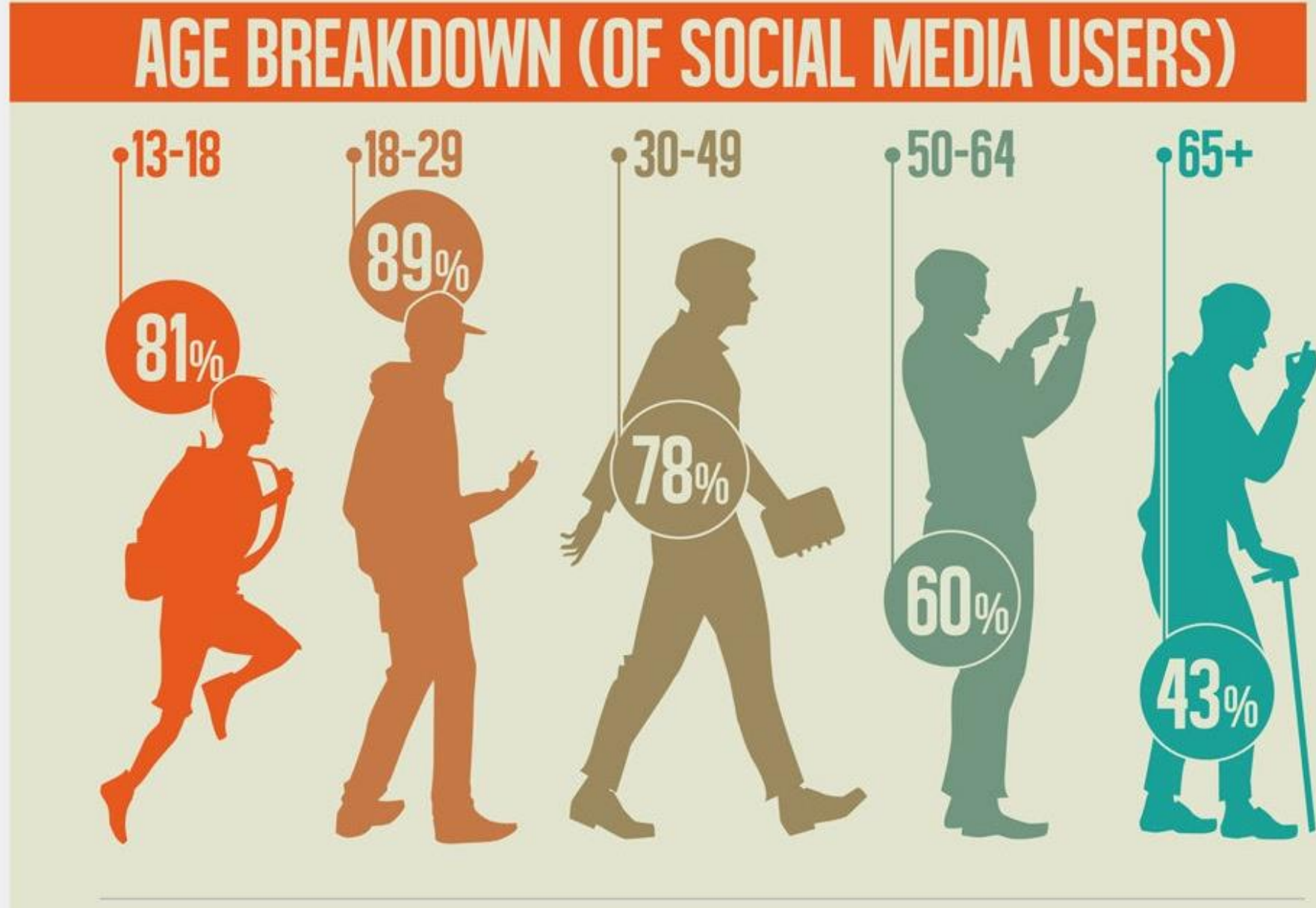**GenZ'ers lead** the way with having **social media, text message and music apps downloaded** on their phones.

	Social Media	Text Message	Music	Games	Email
	GenZ 55%	GenZ 44%	GenZ 34%	Tie: GenZ/Millennials 33%	Baby Boomer 51%
	Millennial 47%	Baby Boomer 39%	Millennial 23%	—	GenX 43%
	GenX 41%	GenX 38%	GenX 15%	GenX 27%	Millennial 35%
	Baby Boomer 29%	Millennial 34%	Baby Boomer 12%	Baby Boomer 16%	GenZ 28%

TV USAGE

GenZ'ers are more likely to **watch shows at their convenience**, either through their streaming service or on mobile devices.

Live on TV: 28% / 43% / 58% / 69%
Streaming Service: 31% / 24% / 13% / 9%
Mobile Device: 12% / 8% / 5% / 3%

This survey was conducted among 1,986 Americans aged 13+ from February 14 - March 3, 2017. For more information, please email us at info@lab42.com
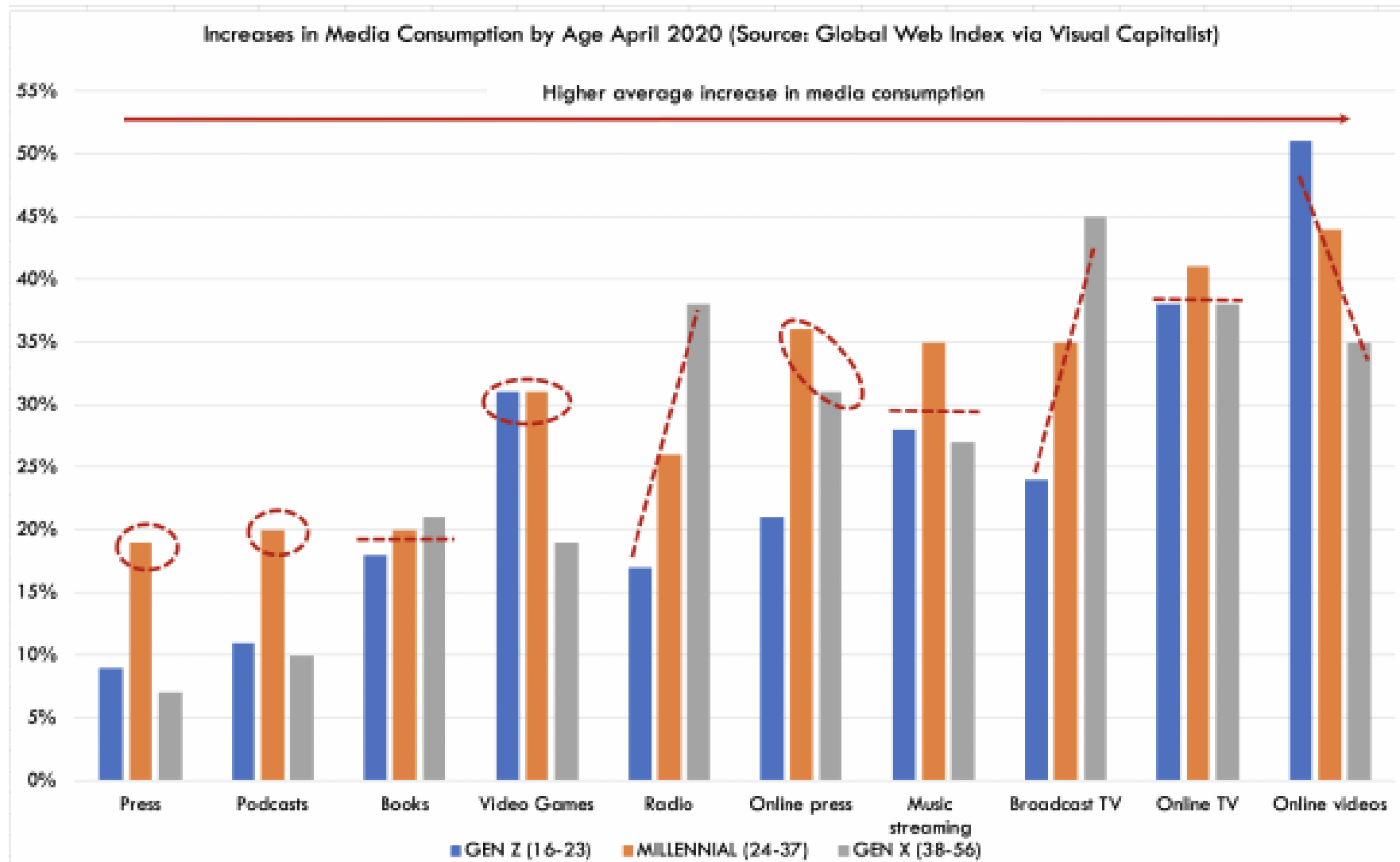
- Gen Z chose Instagram as the platform to follow brands
- Baby Boomers spend most of their time on YouTube and Facebook Feed
- Gen Z, Gen Y (Millennials) and Gen X selected YouTube as the platform they rely on when making purchasing decisions

7

- Generation Z grew up in a digital world, so it is no surprise that they are pretty savvy when it comes to online and technology.
- Nevertheless, Millennials and Baby Boomers seem to have been very quick on upgrading their online social behaviour and their utilization of high-tech.

AGE BREAKDOWN (OF SOCIAL MEDIA USERS)

- 13-18 — 81%
- 18-29 — 89%
- 30-49 — 78%
- 50-64 — 60%
- 65+ — 43%

WE ARE HUNGRY FOR MORE CONTENT...

Increases in Media Consumption by Age April 2020 (Source: Global Web Index via Visual Capitalist)

Source: https://thebrandgym.com/how-has-has-media-consumption-changed-by-generation/

DISINFORMATION AND "FAKE NEWS"

SOURCE, SPREAD AND CHALLENGES

"FAKE NEWS" IS NOT NEWS YOU DISAGREE WITH...
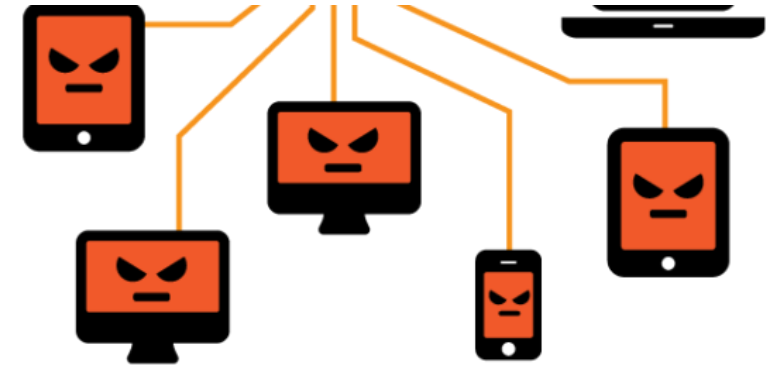
- Oxford Dictionaries describe "fake news" like:

- false reports of events, written and read on websites*Many of us seem unable to distinguish fake news from the verified sort.*

- *Fake news creates significant public confusion about current events.*

- Oxford Dictionaries also selected "post-truth" as its word of the year 2016, and has defined it as the state of affairs when "objective facts are less influential in shaping public opinion than appeals to emotion and personal belief."

- In addition to the billions of human beings using social media, there are also millions of robots, or bots, residing within. Bots help to propagate "fake news" and inflate the apparent popularity of "fake news" on social media.

Source: https://www.cits.ucsb.edu/fake-news/spread

HOW BOTS HELP IN THE PROPAGATION OF "FAKE NEWS"?

- Artificial intelligence allows bots to simulate internet users' behavior (e.g., posting patterns) which helps in the propagation of "fake news".

- They respond to postings or questions from others based on scripts that they were programmed to use.

- They also generate debate by posting messages about trending topics: by hunting for, and repeating, information about the topic that they find on other websites.

- The spread of "fake news" by social bots is possible due the capabilities that bots have to search and retrieve non-curated information (information that has not been validated yet) on the web.

- So bots spread "fake news" in two ways: They keep "saying" or tweeting "fake news" items, and they use the same pieces of false information to reply to or comment on the postings of real social media users.

- Bots' tactics work because average social media users tend to believe what they see or what's shared by others without questioning. So bots take advantage of this by broadcasting high volumes of "fake news" and making it look credible.

- But bots aren't apparently that good at deciding what original comments by other users to retweet. They're not that smart.

HOW PEOPLE HELP THE SPREAD OF "FAKE NEWS"?
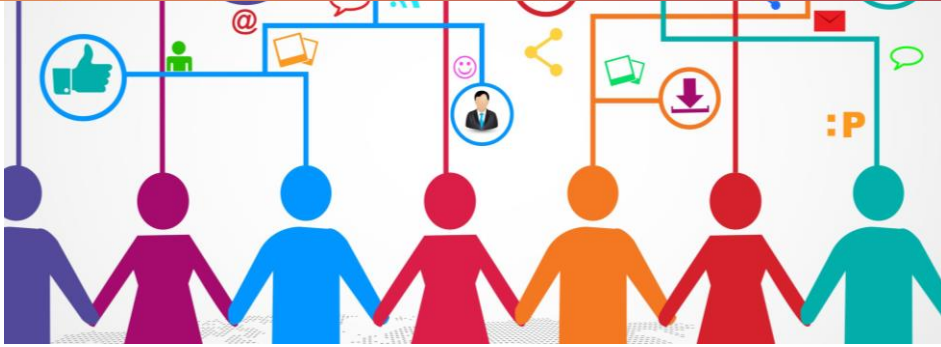
- People are smart. But people are emotional. Real people also play a major role in the spread of "fake news", too.
- Bots might still exist in the future, but most of the time, the spread of fake news is a consequence of real people, usually acting innocently. All of us, as users, are potentially the biggest part of the problem.
- The role emotions play when it comes to sharing news in social media →
  - reading true news mostly produces feelings of joyfulness, unhappiness, expectation, and trust;
  - reading "fake news" produces feelings of amazement, anxiety, shock, and repulsion.

- One thing about social media that makes humans more susceptible to "fake news" is the popularity indicators that social network sites provide, that people use to signal approval for a message to other users.
- Research also shows that people are more likely to share "fake news" than real news → real human Twitter users are 70% more likely to retweet fake news than truthful stories. People like novelty and they like to share it with others. Fake news stories—since the events or statements they describe never really happened—are always novel!

Source: How is Fake News Spread? Bots, People like You, Trolls, and Microtargeting | Center for Information Technology and Society - UC Santa Barbara (ucsb.edu)

WHAT'S NEXT

LOOKING AHEAD

MICROTARGETING

Combining social/online data and offline data is a key to micro-targeting

Social Data
- Social Site Affiliation
- Interests and brand affinities
- Occupation
- Education
- Location
- Reviews

Social Graph
- Targeting friends
- Extending reach
- Social Affinity

Offline Data
- Income
- Presence of children
- Home Ownership
- Purchase Behavior
- Lifestyles
- Much more

Micro-Targeting
- Targeted lists of people for postal and/or email programs
- Serve display media to only people you want
- Use customer insight to tailor messaging and media plan

JACOBS & CLEVENGER

29

Copyright 2011   Jacobs & Clevenger

One way of propagating "fake news" is through social media analytics. The latter is mainly created with the usage of cookies. Yet websites don't only save cookies on your computer for your convenience. Cookies on your computer system also track your actions on the web across all the websites you visit. These cookies are called tracking cookies, or trackers for short

Many of the trackers come from companies that collect and analyse your web usage in order to personalize ads.

Every time somebody visits such a website, that website (or more precisely, the programming code that's associated with the button's appearance on your screen) reports your visit to Facebook. This happens whether or not you press the like button, are logged into Facebook or not, or even whether you are a Facebook user.

Source: How is Fake News Spread? Bots, People like You, Trolls, and Microtargeting | Center for Information Technology and Society - UC Santa Barbara (ucsb.edu)
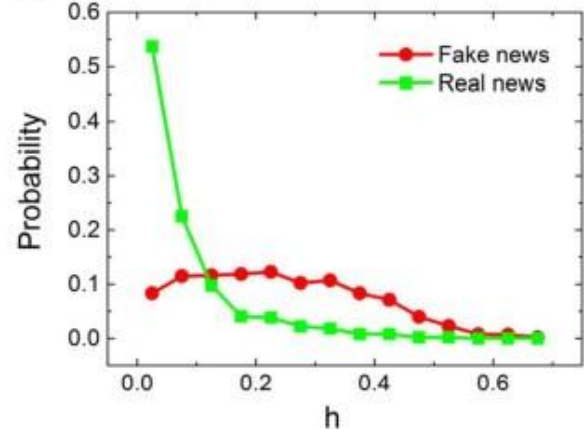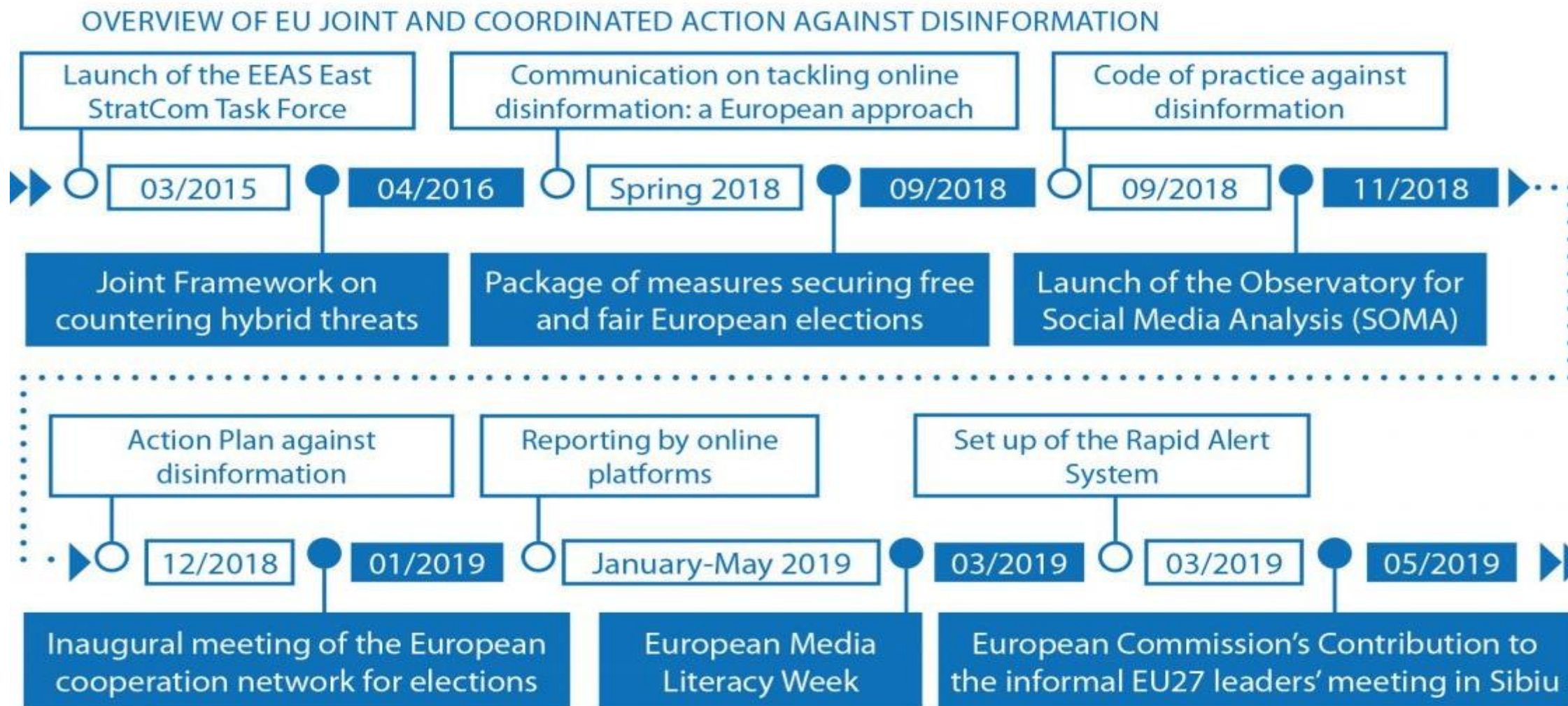
PROPAGATION OF "FAKE NEWS"
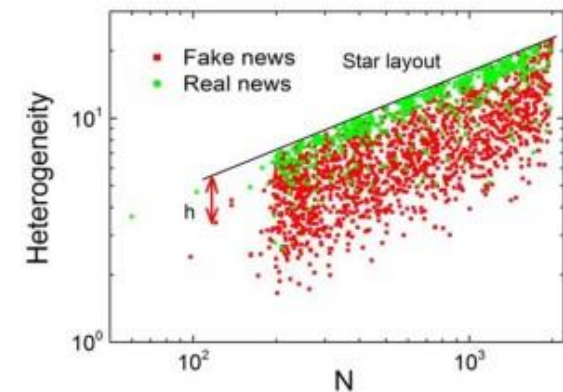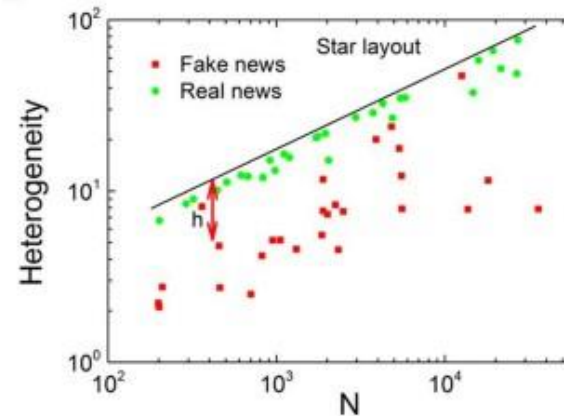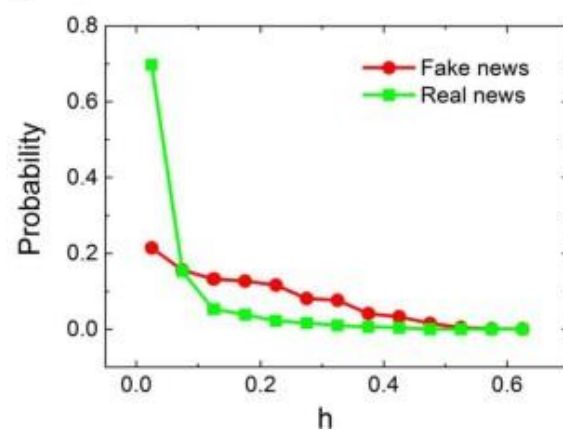
- Facebook, Google, and other websites that provide trackers analyse the websites you have visited and also what you did while you looked at those websites—what you click on, how much time you spend there, what other pages you open, etc.— by running scripts (little programs) in your browser, that you're not even aware of.

- Based on these data, they calculate models to predict your interests and your purchase patterns, to select and deliver the kinds of advertisements you are most likely to react positively to.

- There are some firms that specialize in analysing your data to convince you to vote for a political candidate, for instance. They can make you see ads--or "fake news" stories--when you use the web or social media.

Source: https://epjdatascience.springeropen.com/articles/10.1140/epjds/s13688-020-00224-z

16

Tackling "fake news" in the UE

OVERVIEW OF EU JOINT AND COORDINATED ACTION AGAINST DISINFORMATION

Launch of the EEAS East StratCom Task Force — 03/2015

Joint Framework on countering hybrid threats — 04/2016

Communication on tackling online disinformation: a European approach — Spring 2018

Package of measures securing free and fair European elections — 09/2018

Code of practice against disinformation — 09/2018

Launch of the Observatory for Social Media Analysis (SOMA) — 11/2018

Action Plan against disinformation — 12/2018

Inaugural meeting of the European cooperation network for elections — 01/2019

Reporting by online platforms — January-May 2019

European Media Literacy Week — 03/2019

Set up of the Rapid Alert System — 03/2019

European Commission's Contribution to the informal EU27 leaders' meeting in Sibiu — 05/2019

AGERPRES

MEASURES FOR AWARENESS AND EDUCATION IN CYBERSECURITY

AGERPRES MISSION AND SPECIAL PROJECTS

➡️ The mission of AGERPRES National News Agency has been, is and will be that of informing promptly and objectively, providing the Romanian press, as well as the media abroad, the possibility to permanently connect with equidistant and correct journalistic materials of interest.

➡️ We realize and are responsible of the fact that the pieces of information we deliver reach millions of people and that, in addition to information, our role is also to bring awareness and even to educate, as the session title says.

IN 2016 **AGERPRES** LAUNCHED THE

CYBERSECURITY SECTION, WHICH CONTAINS NEWS

DEDICATED TO THE STRATEGIC PROBLEMS OF CYBER

SPACE AND SECURITY.

AGERPRES NATIONAL NEWS AGENCY LAUNCHED THE **#CYBERFILES** EDITORIAL PROJECT, WHICH INCLUDES THE PRESENTATION OF SOME OF THE MOST IMPORTANT CYBER ATTACKS WORLDWIDE, WHICH HAD REPERCUSSIONS ON SMALL AND MEDIUM-SIZED COMPANIES, CORPORATIONS, GOVERNMENTS OR INSTITUTIONS OF NATIONAL INTEREST, BUT ALSO ON HOME USERS.

THE ARTICLES CAN BE READ ON THE INTERIOR ECONOMIC NEWSWIRE, BUT ALSO ON THE PUBLIC WEBSITE WWW.AGERPRES.RO, IN THE CYBERSECURITY AND INTERIOR ECONOMIC SECTIONS.

CYBER SECURITY COURSES FOR JOURNALISTS

❑ In addition to the dedicated journalistic materials, AGERPRES organized together with the Romanian National Computer Security Incident Response Team (CERT-RO), cyber security courses for journalists (for both AGERPRES journalists and all those with the national and local media).

THE IMPACT OF "FAKE NEWS" CAN BE COMPARED TO THAT OF A TROJAN HORSE. TOGETHER WE CAN OVERCOME THE NEGATIVE EFFECTS ON SOCIETY!

THANK YOU!

AGERPRES

✉

claudia.nicolae@agerpres.ro

WWW.AGERPRES.RO