# Data & Accountability Ten Global Media Trends & The Future of Journalism

NATIONAL PRESS FOUNDATION – DISCUSSION WITH FELLOWS BOB PEARSON | THE NEXT PRACTICES GROUP | JANUARY 9, 2022

### PART 1 – HOW OUR MEDIA WORLD IS EVOLVING....AND HOW BAD ACTORS UTILIZE IT TO THEIR ADVANTAGE



# THE MEDIA HABITS OF OUR AUDIENCE ARE BEING SHAPED BY SOCIAL MEDIA WORLDWIDE

Understanding how change is occurring can lead to how we view the future of journalism

## TWO COMPANIES AND ONE COUNTRY DRIVE MEDIA WORLDWIDE



# Two companies and one country reach the majority of people online (5.1bn)



Facebook (FB, Instagram, WhatsApp); Google (Google, YouTube) and China (TenCent, WeChat, Sina Weibo, TikTok and more)



### The mobile phone is the center of the universe

Average age of 10 for 1st phone; 15:1 ratio mobile to desktop ads for FB



### Our attention spans are 1-3 seconds

Based on billions of interactions within Facebook, Snapchat, Pandora, as examples



# People we respect are replacing "authority figures" as trustworthy

YouTube stars, Instagram and Twitter influencers with followings larger than any media network



#### One platform (gaming) is replacing TV, another is the best place to hide (privacybased platforms)



### THE MOST VISITED SITE IN THE WORLD IN 2021 WAS TIKTOK, UP FROM #7 LAST YEAR

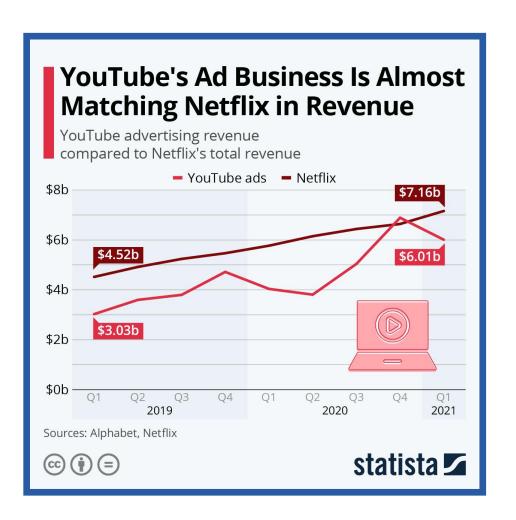
- Top 10 Most popular domains (late) 2021
- 1 TikTok.com
  - 2 Google.com one-third of global advertising occurs here....
  - 3 Facebook.com more than three billion members...
  - 4 Microsoft.com
  - 5 Apple.com
  - 6 Amazon.com
  - 7 Netflix.com
  - 8 YouTube.com the second largest search engine....
  - 9 Twitter.com a top driver of search results...
  - 10 WhatsApp.com more than two billion members...

#### **CHARLI D'AMELIO HAS 114MM FOLLOWERS**

CNN HAS 1.078MM (PRIME TIME AUDIENCE)

# Our definition of "TV" is evolving rapidly

If it can be watched on our device (easily), it matters



# OUR ATTENTION SPANIS 1-3 SECONDS

The journalistic pyramid matters for all content



# WEARE IN THE ERA OF THE "LUKEWARM WAR"

ASYMMETRIC EFFORTS, CYBER & DISINFO ARE A NEW THREAT MIX

# Bac (extremists, countries, counterfeiters, drug dealers, general criminals) actors

all use the same tools, techniques and platforms We learn faster when we study who is innovating, regardless of which type of bad actor they may be

#### THE KEY ELEMENTS OF THE NEW THREAT MIX



#### **Devices**

easy to penetrate

87.5% of the world uses android (open source software)

Upgrades and apps filled with bugs and useful information on us

Hacking in and sending messages directly to us (more authentic)



# Ability to Hide

messaging platforms present new opps and issues

Helpful in important causes, e.g. Belarus and Nexta/Telegram

Helpful for bad actors to start rumors or meet privately

Important to us to focus more on changes in online behavior (analytics)



#### Confusion

the constant threat leads to a new level of distrust

When privacy and safety are compromised, we live in fear.

Maslow's hierarchy of needs kicks in.

#### SEVEN EXAMPLES OF HOW BAD ACTORS WORK TODAY

**Ransomware** 

**Illicit Drugs** 

**Counterfeits** 

**Disinformation** 

**Extremist Groups** 

**Censorship** 

**Elections** 

#### **HOW RANSOMWARE WORKS TODAY**

•	The "Kill Chain" RaaS Model – First, steal data. Then, move laterally and steal more data. Once comfortable, ask for ransomware.	
	• Find a vulnerable, unpatched virtual private network (VPN) or Remote Desktop Protocol (RD, exploit public-facing applications, or gain access through a phishing email.	
	Exploit a secondary vulnerability to gain access and create a login.	
	• Install tools for persistence, backdoors, and/or stealers.	
	• Escalate privileges.	
	Move laterally, enumerate the network, and steal data.	
	Deploy the ransomware.	
	Extort the victim and/or sell the data in illicit communities.	

# CONTI IS RUN BY A GROUP (WIZARD SPIDER) BASED IN ST. PETERSBURG, RUSSIA A SMALL # OF GROUPS ARE THE MOST SUCCESSFUL

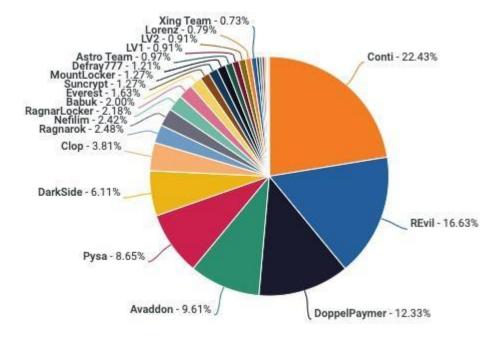
#### RANSOMWARE

#### RANSOMWARE'S INCREASING PREVALENCE

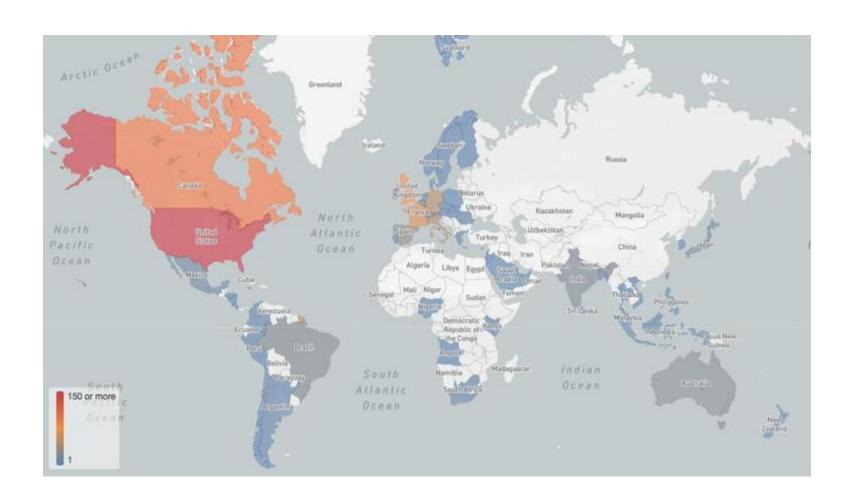
As 2021 progressed through its second quarter and into the third, cyber criminals introduced new—and updated—threats and tactics in campaigns targeting prominent sectors. Ransomware campaigns maintained their prevalence while evolving their business models to extract valuable data and millions in ransoms from enterprises big and small.

DarkSide's highly publicized attack on Colonial Pipeline's gas distribution dominated cybersecurity headlines in May. <u>MVISION Insights</u> quickly identified DarkSide's early prevalence of targets within the United States, primarily Legal Services, Wholesale and Manufacturing, Oil, Gas, and Chemical sectors.

Shutting down a major U.S. gas supply chain grabbed the attention of public officials and Security Operations Centers but equally concerning were other ransomware groups operating similar affiliate models. Ryuk, REvil, Babuk, and Cuba ransomware actively deployed business models supporting others' involvement to exploit common entry vectors and similar tools. These, and other groups and their affiliates, exploit common entry vectors and, in many cases, the tools we see being used to move within an environment are the same. Not long after DarkSide's attack, the REvil gang stole the spotlight using a Sodinokibi payload in its ransomware attack on Kaseya, a global IT infrastructure provider. REvil/Sodinokibi topped our list of ransomware detections in Q2 of 2021.



# ATTACKS CONCENTRATE ON WEALTHY COUNTRIES AND INDUSTRIES KNOWN AS MOST "UNPREPARED"



Industry	Count
Professional Services	162
Internet Software & Services	87
Construction & Engineering	80
Education Services	55
Pharmaceuticals	39
Automotive	37
Consumer Discretionary	36
Health Care Providers & Services	34
Electrical Equipment	28
Air Freight & Logistics	26

## EXAMPLES OF SOCIAL MEDIA IS USED TO SELL ILLICIT DRUGS



### **Cross-Platform Models**

Ex/built fake personas on twitter, create bots to retweet their tweets, SEO improves on Google, those who search discover incorrect/bad information, but trust it and click.



# Seed the Content Infrastructure

Create ghost accounts on Instagram with a phone # in WhatsApp, place messages in Quora or forums.

Seed the web with numbers and messages to lead one to the right encrypted location.



# Privacy-based platforms

Easy to hide, share rumors and plan, courtesy of Facebook.

### HOW BAD ACTORS SELL ILLEGAL PRODUCTS AND SERVICES

**Build fake personas on Twitter** 

**Buy followers from 5k to 200k** 

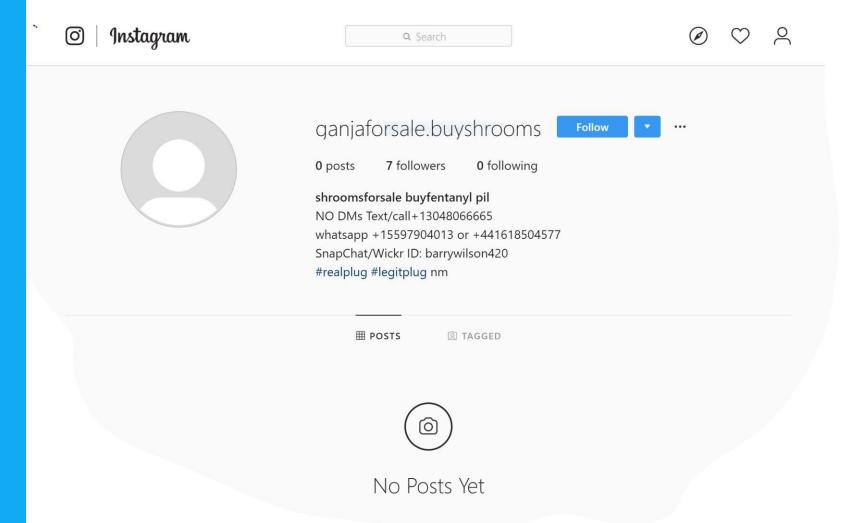
Tweet keywords with links that are within guidelines

**Build bot followers who engage and share to other bots** 

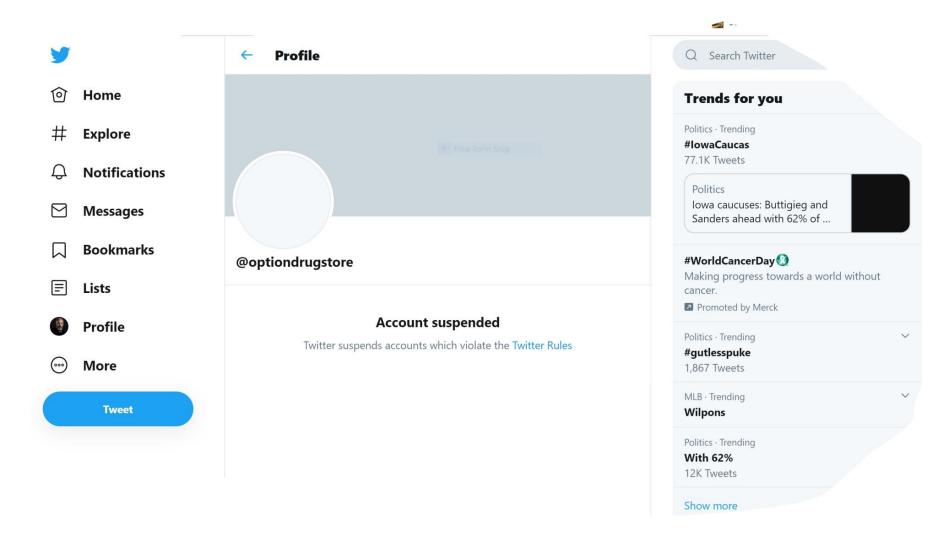
Search engines like this engagement and move up content

People see the content in the first screen, trust that first screen and take action

# Ghost account with phone numbers and privacy-based platform access (WhatsApp)



### ACCOUNT SUSPENDED WELL AFTER IT WAS ACTIVE — A MATTER OF TIMING



# HOW TO SELL COUNTERFEITS -- BUILDING FAKE PERSONAS, FAKE GROUPS OF PEOPLE, OUTLETS AND COMMUNITIES



Frank Evans
@frankevans111

245K tweets105K followers5 following

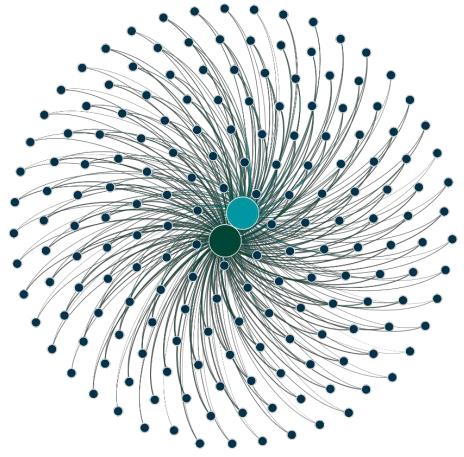
Content posted was promoting canadian-online-pharm.net



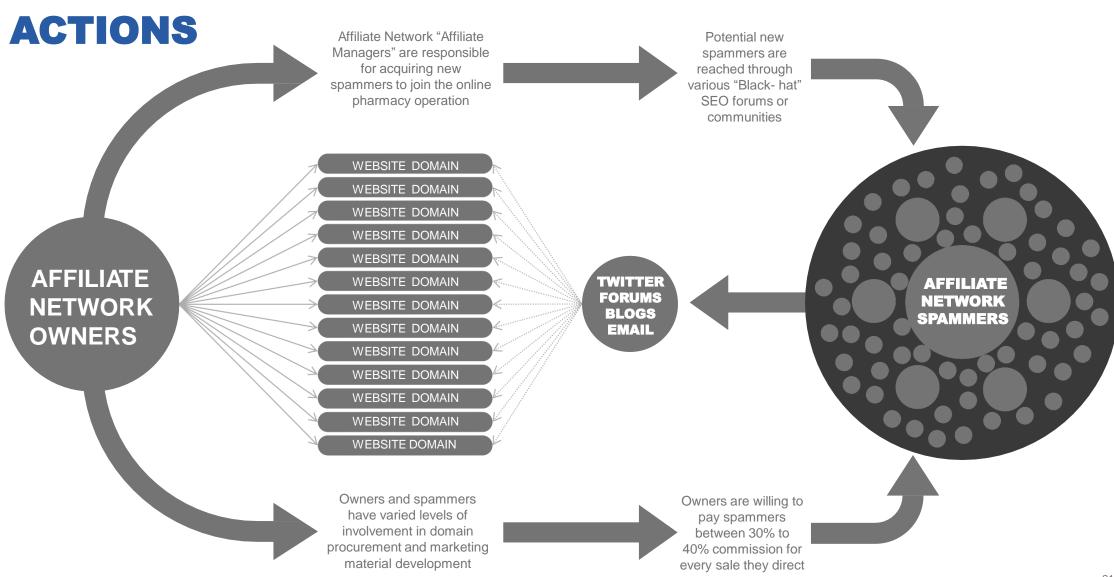
Jina Riggs @Jinariggs1

216K tweets219K followers408 following

Content posted was promoting canadian-online-pharm.net



#### AN ECOMMERCE MODEL UTILIZED FOR BAD



# HOW TO DISINFORM -- THE PLAYBOOK FOR ERODING TRUST

Completely false content: Just make it up

Manipulated content: Real info or visuals used to deceive

Misleading content: Partial real info used to create false impression

False connections: Headlines/visuals unrelated to content, but flashy

False context: Real content combined with fake content

Imposter content: Impersonating a real person

Censorship: Restrict communication and replace it with false info

#### FIVE INGREDIENTS DRIVING DECEPTION'S INCREASE

#### **Voice/Audio Compression**

Record, translate in cloud, change key messages, compress voice and a new statement is ready from a trustworthy source — you.

You just didn't say it.

#### **Language/NLP-Driven Fake Content**

Summarize key content, change 1-2 bullets, share.

The needle in the haystack.

#### **Undercover/Fully Fake Personas**

Credible profiles, audio recordings, use of FB live to personalize the conversation, bot network debates.

The new undercover.

#### The New Dark Web/Shift to Encrypted Platforms

Plan out next innovations behind closed doors in WhatsApp. What is said when they resurface?

#### Adversaries Make it Easy/ Alternative Sources of Goods & Services

Want to buy active ingredient of a hypertension drug or buy 200,000 followers or find people to recruit?

Welcome to Alibaba...

The best disinformation is considered to be "information"

# disinformation can hide in plain sight

The best disinformation is considered to be "information"



# THE EVOLUTION OF CENSORSHIP

- We are blocked
- We are shadow banned and lose audience
- We are prevented from seeing new content (but don't realize it)
- Our account is terminated in our favorite gaming platform

Our ability to utilize data science to slightly alter or selectively enforce censorship is rapidly accelerating

## HOW AN ELECTION CAN BE INTERFERED WITH — 2.0 A PARTIAL PRIMER... 15 KEY ACTIONS

- Offer subsidized phones and/or free phones ensures citizens have right phones
- Mobile phone penetration build back doors into open source mobile software. Can now track all information and location data.
- Form message-based platforms for private discussion — invite people on your side into private forums to get special information.
- 4. Build taxonomy-based software to understand who to influence
- Use blockchain-related content system to shoot 5 hours of video and create 5,000 videos.
- 6. Bombard and distract with our video to overwhelm other side.
- 7. Use audio compression to create false narratives

- Implement new NLP techniques to add in fake content drip by drip
- 9. Create fake outlets, organizations and people to disseminate information
- 10. Create bot-driven debates
- 11. Start rumors in message platforms
- 12. Expose flaws in US-based social companies to inflame rhetoric within the US
- 13. Track all students within US and feed information to diaspora
- 14. Distract media with "obvious" disinformation while real damage is being done.
- 15. Censor all incoming media related to these efforts to "protect citizens" from hearing about it within their country

#### **KEY DRIVERS OF CHANGE IN POLLING**

**Subconscious behavior** more important to measure in highly emotional/partisan issues

The "non-behavior" e.g. silence, apathy, decrease in intensity is often more important than what we say

**Narrowcasting** is leading to overinterpretation of what real trends actually are

Highly partisan and/or even fake news has a cumulative impact even if we think it does not

A new set of peers are emerging as influencers (the interpreters)

# PART 2 – EXAMPLES OF OPPORTUNITIES FOR JOURNALISM HOW OUR MEDIA IS EVOLVING

HOW WE CAN CREATE NEW OPPORTUNITIES TO REACH OUR AUDIENCE

# 3

# THE BEST DEFENSE IS A GOOD OFFENSE

### JOURNALISTS WHO ARE FLUENT IN HOW THE MEDIA WORKS CAN OPTIMIZE THEIR IMPACT

Human beings are the new media

Our media models are being transformed by our audience, not the industry

#### **OUR BRAINS OPERATE IN FINITE TERMS**



A finite # of Q&A's answers majority of queries

Assume an average of

200-400

per brand



A finite # of **Questions are asked about any issue** 

Approximately

**77** 



A finite # of Words drive the majority to your story

Normally

15 words or phrases max



A finite # of Influencers drive share of conversation

Never more than

**50** 

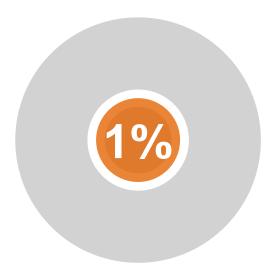
## TWO MAJOR MEDIA MODELS DRIVE AUDIENCE ARCHITECTURE

The 1,9,90 Media Model

# The 5 R's of Media Efficiency

#### THE 1,9,90 MODEL FOR EARNED & SHARED MEDIA

#### **Create** Content

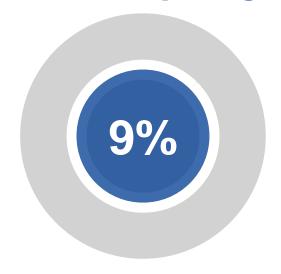


#### Influencers

Individuals who drive ideas that fuel conversations and are sharing with current/potential customers.

Focus content and relationships here.

#### **Share & Repackage**



#### **Advocates**

Individuals who carry a trend, and where top influencers source ideas.

Important to surround with paid & earned media.

#### **Listen & Learn**



#### **Enthusiasts**

Consumers who read, search and consume trends online every day.

Important to listen, educate, share and provide unique experiences.

#### THE FIVE R'S OF MEDIA EFFICIENCY

#### **Right Influencers**

We know which human beings can/will shape each market segment, pro or con

#### **Right Audience**

We know exactly how the audience architecture works and how our audience learns

#### **Right Content**

We know what content, outlets and people have most influence for each profile

#### **Right Language**

We know the language of the neighborhood (accelerators and triggers)

#### **Right Channels**

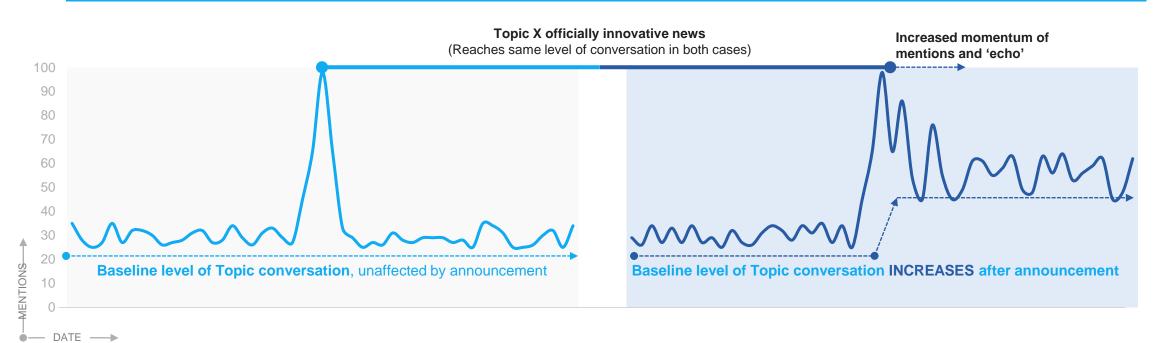
We know where audiences learn by outlet and channel and time of day

35

# CONTENT ELASTICITY — REACHING THE 9% EFFECTIVELY

Standard model Announcement VS. Announcement boosted by 9%





### THREE DRIVERS OF AUTHENTICITY

### **IDEAS** — KNOWLEDGE-SOLUTIONS

#### **Share Ideas**

Let's improve the next product or service or cause together



#### **Share Knowledge**

Here is what I know... hope it helps you



### **Help Peers**

I had the same problem, here is what I did





# SEARCH IS THE MOST IMPORTANT AND LEAST UNDERSTOOD MEDIA PLATFORM ON EARTH

It is the repository of our collective "truths"

## SEARCH IS OUR BRAIN, LIBRARY AND JURY COMBINED



## It is the "uber" of location-based information

We can see who has influence by topic by town.

Imagine how this could revolutionize and reinvent the Designated Market Area (DMA) system.



### It is literally the "library" of planet earth

We can look back 20,30,40 years and understand how a reputation has evolved and why.



### It directs us to the new "gold mines" of public datasets

We can query and find what matters for a disease for the last decade and know every person and publication in seconds.



# It shows us who really matters for the long-term

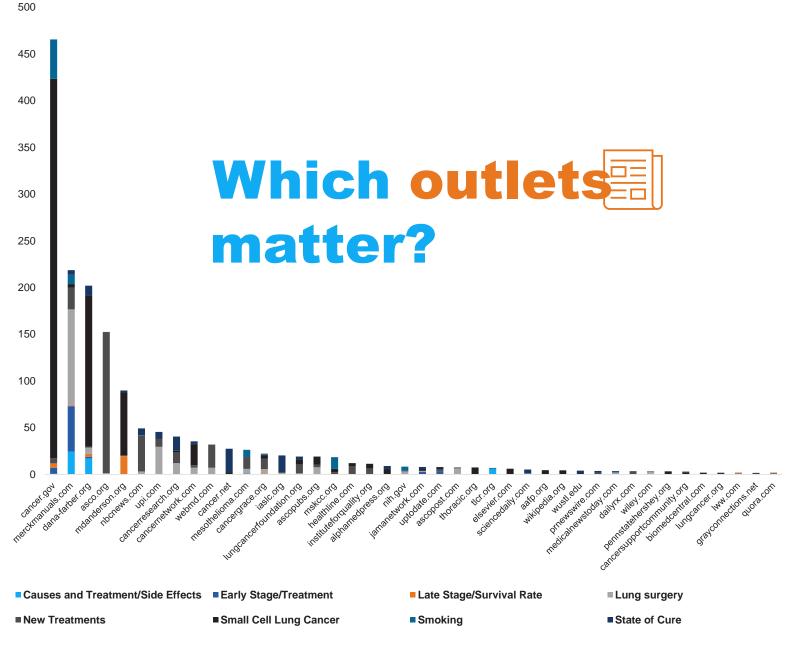
If your content is relevant, it will show up on the first screen.

# This stacked bar chart represents an Algorithmic approach to identifying content outlets, their areas of focus, and their visibility in Organic Search.

Visibility scores are based on keyword volume and rank position for each outlet.

Color coding for each **outlet** describes areas of focus by leveraging the topical segmentation established by network analysis.

Showing the top domains ranking in organic search for a sample of ~4,000 keywords in the lung cancer space.





# WHEN WE PERSONALIZE CONTENT, WE CONNECT WITH OUR AUDIENCE

### IF WE PERSONALIZE OUR NEWS, WE WILL EXPONENTIALLY INCREASE OUR REACH



## Humans trust other humans they can rely on

We want to hear from a specific person vs. receive content from a third party.

This can be a digital media manager or a member of the newsroom.

What matters is consistency and authenticity of the conversation.



## Our audience wants regularity and authenticity on a personal level

If we can listen to someone tell us what is important, we are more likely to listen and return. We become vested.

We return to podcasts of people we like. We zero in on anchors we like. We do the same in social media.



## A new form of news digest can be created

Brief introductions from a familiar person, leading to the news.

Create a one-minute lead-in describing what is ahead to personalize the interaction, then show the news of the day. Critical step.

### WHAT CAN WE DO DIFFERENTLY?

### Build your personal media platform -- develop a follower strategy for social media channel

- Who can you follow who may expand your reach?
- Where can you show up to expand your audience?

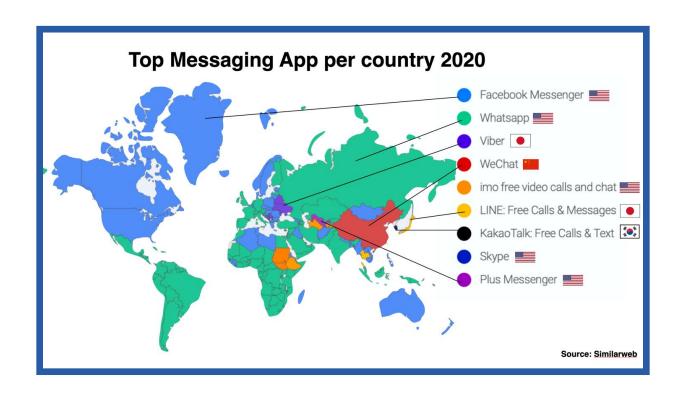
### Personalize your reporting – how do you share your insights in social media to introduce your reporting?

- Can you introduce your articles in Facebook?
- Can you share an additional photo to complement a story on Instagram?
- Can you answer the most common questions asked in twitter?

# 6

### AS TECHNOLOGY TRANSFORMS SOCIETY, IT CREATES NEW OPPORTUNITIES AND NEW ISSUES FOR US TO CONSIDER

The need for private dialogue is driving the creation of new platforms worldwide



# INTERNATIONAL MEDIA ARE IN TELEGRAM

When will the next CNN be built across a message platform in all key countries?

Service	Link	Followers
BBCPersian	@bbcpersian	1.0m
B B C News አማርኛ	@BBC_amharic1	60k
BBC News   Русская	@bbcrussian	36.3k
RT на русском	@rt_russian	125.7k
ዶይቸ ቬለን   DW AMHARIC	@dwamharic_news	1.7k
Bloomberg	@bloomberg	70k
BBC NEWS Україна	@bbcukrainian	25.1k
The Washington Post	@washingtonpost	25.1k
The Bell — news	@Bell daily	16.2k
The Quint	@TheQuint	41.7k
la Repubblica	@repubblica	29.9k
Reuters: World	@ReutersWorldChannel	5.6k

### 50% OF ALL SEARCH TODAY IS AUDIO-BASED

THE NEXT WAVE OF MEDIA INNOVATION WILL OCCUR IN AUDIO WILL YOU PARTICIPATE IN SHARING YOUR INSIGHTS VIA AUDIO?

### THE POWER OF THE PHONE....

Today, we can create videos or photos, edit and produce content of excellent quality.

Tomorrow, we will be able to create our own audiocast segments, change our voice, embed music/sounds and build our own stories.

A new form of rapid communications will emerge. A popular way to reach people in places where video still creates a bandwidth issue.

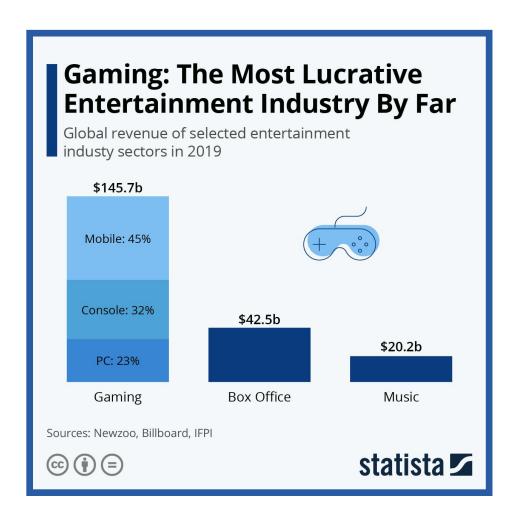
Will we start to create and/or expand our stories in new ways?

GAMING IS
THE LEAD MEDIA PLATFORM FOR
YOUTH

HOW CAN WE BECOME RELEVANT IN THIS PLATFORM?

# Gaming is the new family room, it is 10x the size of the NFL

Gamification & Game Mods can reach this audience with newsworthy info



### AN INVISIBLE SEARCH ENGINE IS BEING DEVELOPED IN OUR HOMES

### HOW WILL WE TRACK FUTURE INNOVATION SO WE CAN GUIDE OUR AUDIENCE?

### FROM ALEXA TO.....

### **Everything we say is heard**

Words, noises, doors shutting...

### Every device starts to inform the new "central command" of our house

What can we learn from these continual and disparate data sources?

### Companies are incented to know what we do and why

Companies used to ask to visit our house to observe us. Now, they can just track our behavior digitally.

### Privacy takes on a new meaning for all of us

What benefits do we get for being tracked in all we do?

# THE SHIFT FROM GENOME TO MENOME WILL CHANGE THE TENOR OF THE PRIVACY AND SAFETY DEBATE

## MASLOW'S HEIRARCHY OF NEEDS IS ALIVE AND WELL

#### **OUR PERSONAL HEALTH CLOUD**

A PERSONAL "MENOME" IN THE CLOUD FILLED WITH OUR GENETIC DATA, HEALTH RECORDS AND OTHER RELEVANT INFORMATION. SINCE OUR HEALTH IS IMPORTANT TO EVERYONE IN THE WORLD, INVESTMENT WILL BE MADE TO WELD THESE DISPARATE DATA SETS TOGETHER TO IMPROVE OUR KNOWLEDGE AND, ULTIMATELY, OUR HEALTH. THESE SAME TECHNIQUES WILL MAKE IT EASIER FOR US TO COMBINE ALL TYPES OF INFORMATION SOURCES TOGETHER TO PROVIDE A MORE BALANCED PICTURE OF ANY SITUATION.

### THE FUTURE OF DISINFORMATION — TOP 10

- It will be easier to disinform in the future due to the evolution of our "content consumption habits" worldwide
- 2. The mobile phone is the center of the universe for the 4.5 bn people online hard to reach, easier to hack into
- Intelligence gathering platforms and models are not keeping pace with the evasion techniques of bad actors
- 4. Gaming and message-based platforms are our two largest communities
- 5. The ability to centralize your approach, move quickly and stay focused for the long-term will win, similar to how the best brands in the world work today

- 6. Censorship has many forms economic censorship is perhaps the largest threat
- 7. Understanding exactly how a bad actor works is critical to developing the right "antidotes"
- 8. All bad actors use similar techniques. Study counterfeiters, drug dealers, terrorists and other criminals to accelerate our knowledge of what's next
- 9. New software platforms will provide us with new ways to surprise and overwhelm our opponents
- 10. The battlefield stretches across 65+ languages. We must succeed in nearly all of them

### THE ABILITY TO IMPACT OUR AUDIENCE HAS NEVER BEEN MORE IMPORTANT OR RELEVANT

UNDERSTANDING HOW MEDIA AND TECHNOLOGY ARE EVOLVING WILL GIVE US THE CLUES WE NEED