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# Social Media & Well-Being

The impact of social media on youth... explained.



01

# Tech 101

Key concepts in the tech world today



# The Attention Economy

Social media platforms make **money through advertisements.**



**More users** online, for **more time**, allows for more ads.



Their financial model becomes, **“Time on Device”**

meaning...

**Social media makes money from your attention.**



# The **Power** of the Attention Economy

“If you’re not paying for the product, **you** are the product”

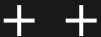
So then what's the product?

“It’s the gradual, slight, and imperceptible **change in your own behavior.**”

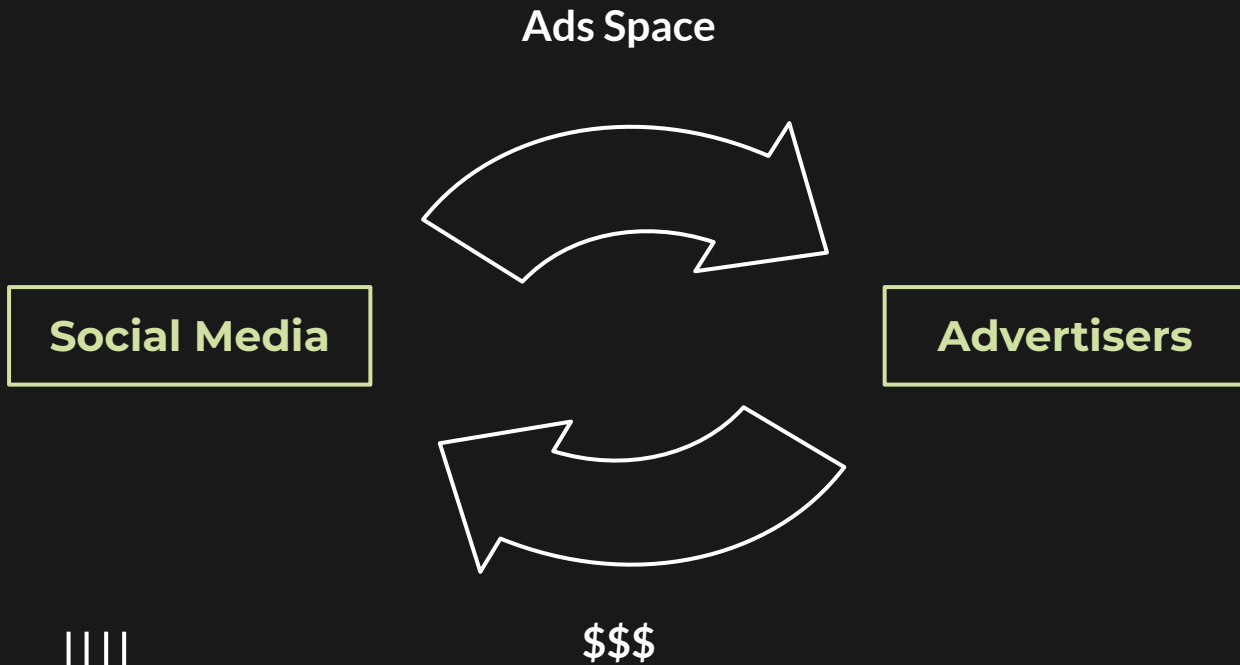
- The Social Dilemma

Social media influences what we do, how we think, who we are. It can change the way in which the whole world perceives reality. Advertisers know this, making social media a very powerful and sought after marketing space.

It’s **worth a lot** of money to manipulate the world’s thoughts.



# The Social Media-Advertisers Exchange



Social media companies are in the business of providing the **best ad space**.

↓  
Need to give advertisers **certainty** that their ads are effective.

↓  
Need to make **accurate predictions** for what users will find interesting.

↓  
Gather lots and lots of **data**.

# The Attention Economy: Diving Deeper

- Shortening of attention spans

- Social isolation

- Political polarization

- Outragification

- Loss of critical thinking ●

- Mental health issues ●

- Loss of romantic intimacy ●

- Disinformation ●

## Who's Most Affected?

of the 4.62+ billion users

- 40% of **teen users** feel more “unattractive”
- **Users over 50** are most susceptible to fake news
- Americans expressing consistently **liberal or conservative** opinions has doubled
- And many more...

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## What's Being Promoted?

The “Single Story”

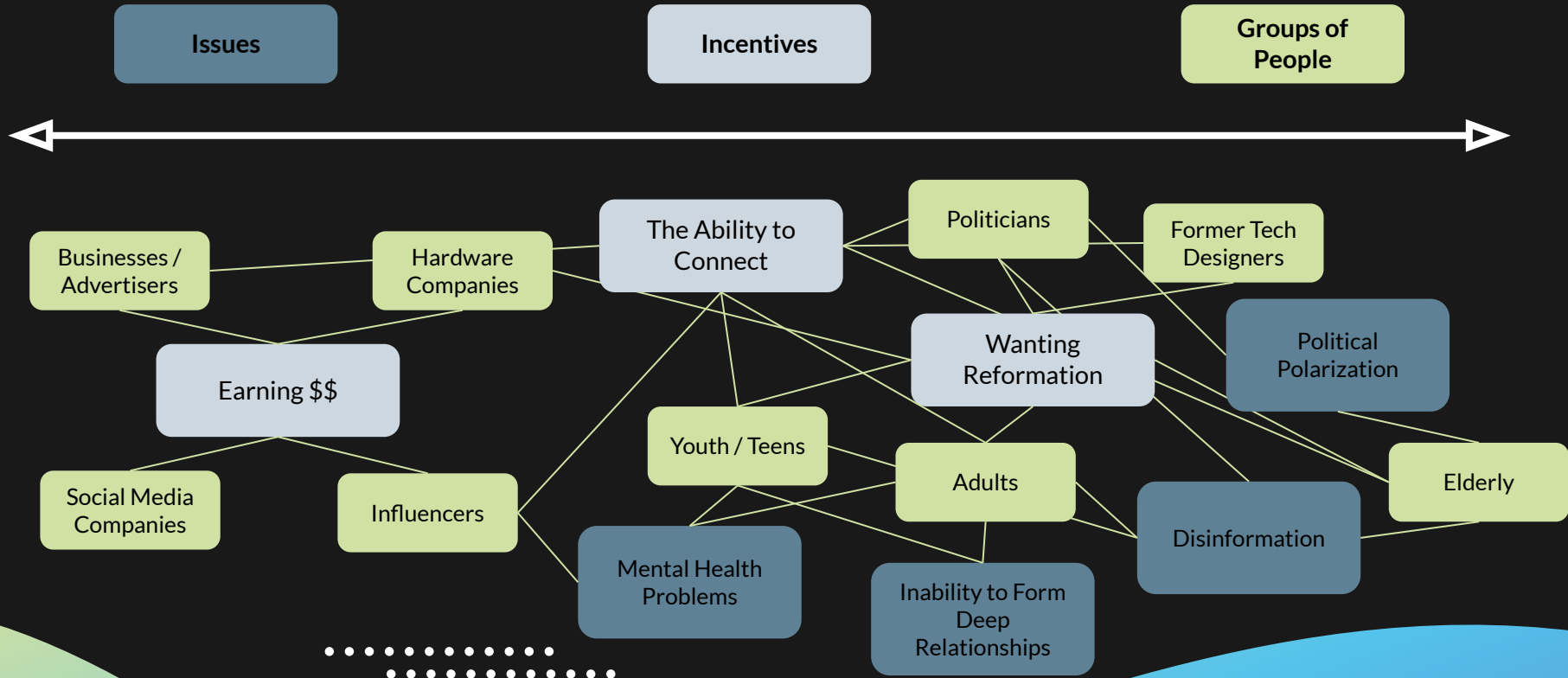
- **Shorter attention spans**  
→ short, exaggerated content
- **Replacing** holistic, proofread newspapers  
→ we watch **21-34** second TikTok videos often by non-experts
- **Increases** prejudice, political polarization, disinformation, etc.

## Opposing Perspectives

Some of the Arguments

- “Political polarization isn’t a result of social media”
- “The research is mischaracterized”
- **But at the same time...**
- Some tech executives limit their own kids’ tech usage
- “We didn’t do enough to prevent these tools from being used for harm.”

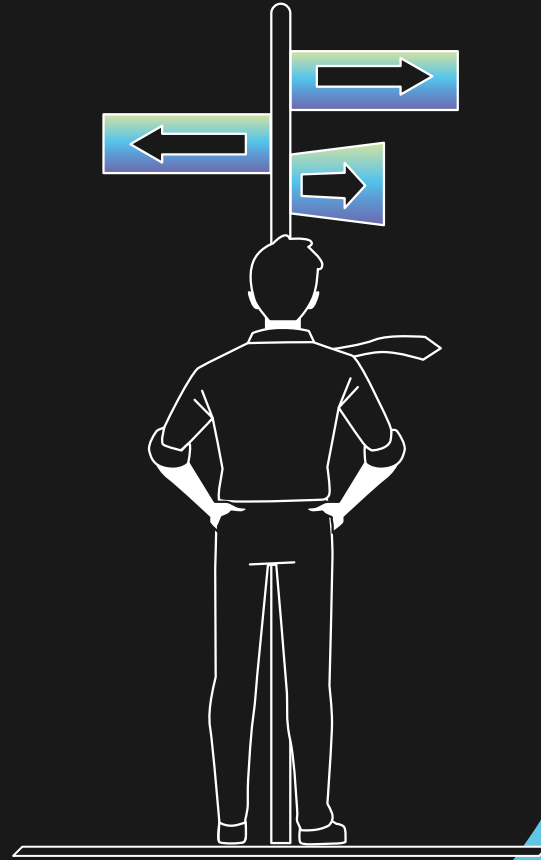
# The Ecosystem





# Shower Thoughts

- ★ Who's **most impacted** by the Attention Economy? Who's to **blame**?
- ★ Is the Attention Economy **causing political polarization**? Contributing to it?
- ★ Is the **diversity of thought** on social media beneficial? Should it be monitored?
- ★ What are the **intentions** of people posting "Single Stories"? Is it the people's **fault**, or the Attention Economy's?





# The Algorithm

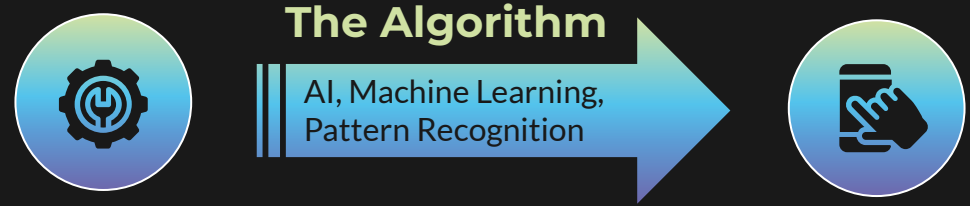
To better hook our attention, social media companies **create sophisticated algorithms**. The next few slides describe what information they take, what is done with that info, and how their algorithm manipulates our psychology.

Kyrie Irving sorry for saying Earth is flat, blames it on Youtube

- Washington Post (Oct 2018)



# Input and Output



## What They Gather

- ❑ **Identity:** age, race, gender, behavior, location
- ❑ **Engagement:** clicks, comments, likes, purchases
- ❑ **Time:** usage intervals, how long you hover over videos

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## Targeted Content

- Personalized...**
- ✓ **Notifications** to draw us back into their app
  - ✓ **Likes/Comments** to keep us seeking social approval
  - ✓ **Feed:** infinite scroll of what we like to keep us engaged

# Why so Powerful



## Computing Power

In the hundreds of quadrillions, computing power of AI doubles every 3.4 months

## Number of Users

4.62 billion users, 424 million new users every year, average of 3 hours a day for American teens

## Psychological Effect

Use harmful strategies to keep our attention, described in more detail on the next few slides



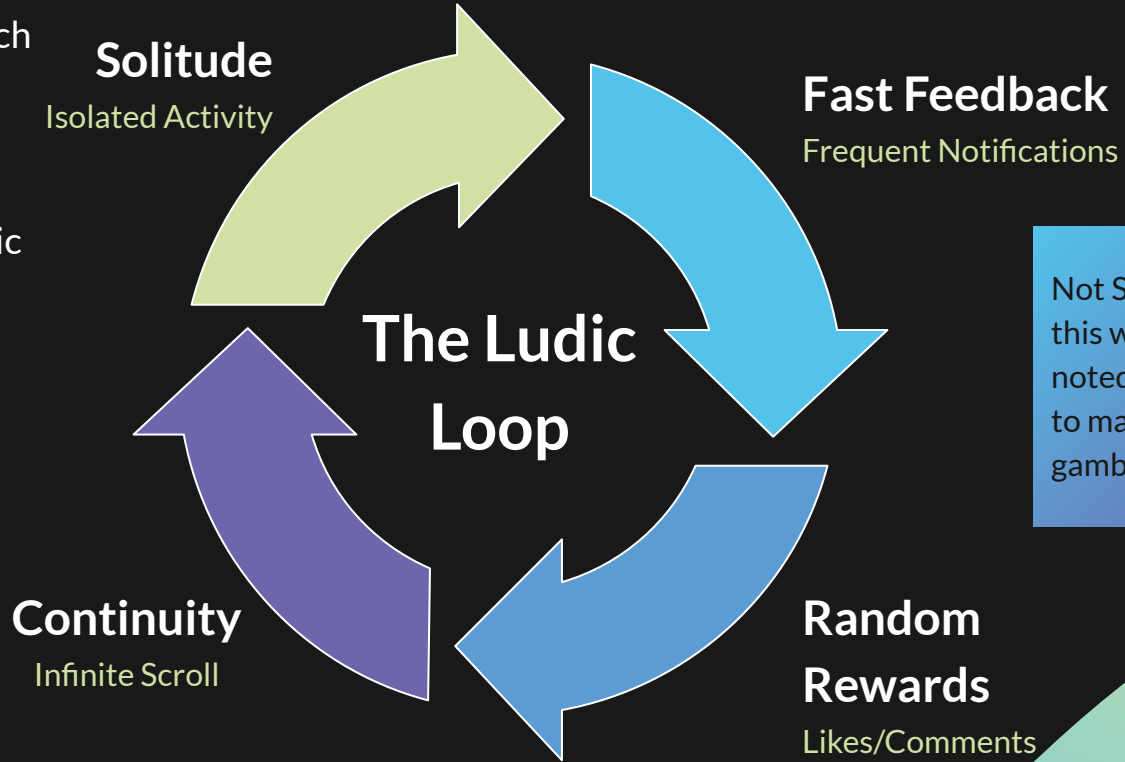
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# Psychological Effect

To **keep users engaged** for as much time as possible, social media platforms incorporate these four components into the users' experience. This is called the Ludic Loop, a phenomenon that traps users in a state of loneliness and isolation **without realizing it**.

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Not So Fun Fact:  
this was originally  
noted in casinos  
to maximize  
gambling time.

# Cognitive Bias

“the ways in which our **brains’ patterns** make us **vulnerable** to manipulation and exploitation”



Cognitive Bias	Biological Reason	Methods of Exploitation
Selective Visual Attention	Chased by a bear – need to focus on only the most relevant information	Vibrations, red dots, flashing lights, banners
Constant Seeking	The brain gravitates to the feeling of “wanting” more than “satisfaction”.	Infinite scroll, swiping for new content
Focus on Negative Content	Our brains process negative information more quickly and thoroughly than positive.	Algorithms are designed to promote articles containing extremist points of view.
Conformity Bias	Compare ourselves to others to ensure we societally fit in.	Filters to change one’s image, “likes” as validation

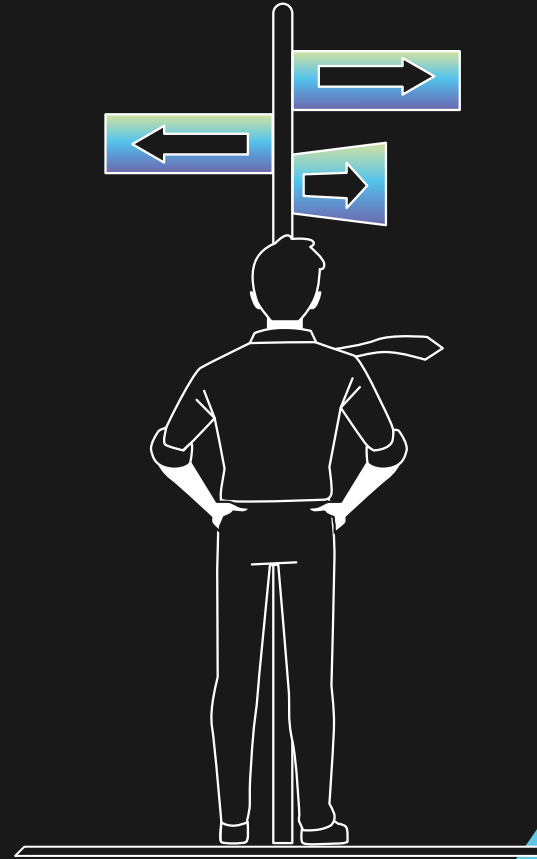
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# Shower Thoughts

- ★ Is there an algorithmic feature that **varies the content** in our feed?
- ★ Does the algorithm heavily **weigh short-term search interests** over long-term interest patterns? How does this contribute to the spread of **conspiracy theories**?
- ★ Where is the **breaking point** in the number of users online, or computing power, or psychological impact?



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# The Negative Implications

Four of the major impacts of social media

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# Inability to Form Deep Relationships

## Hedonic

- ☐ Positive emotions
- ☐ Helpful in day-to-day life
- ☑ More shallow/superficial



Social Media Relationships

## Eudaimonic

- ☐ Broader experience
- ☑ Deep satisfaction
- ☐ Side Effect: boosts hedonic



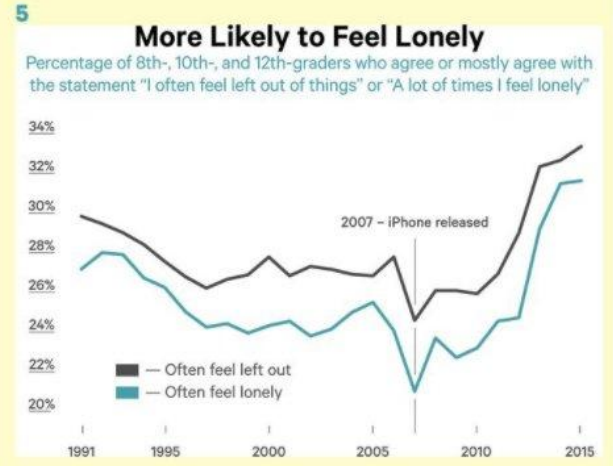
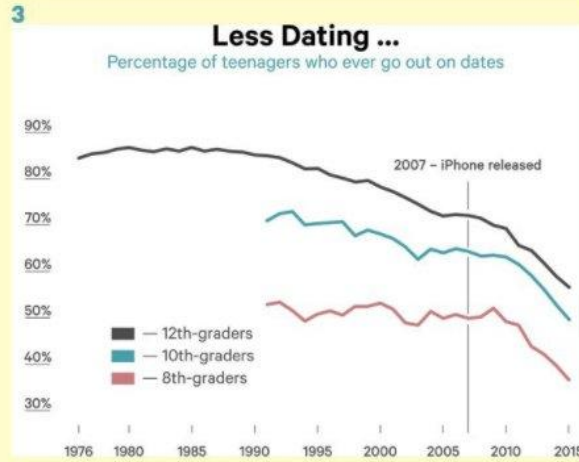
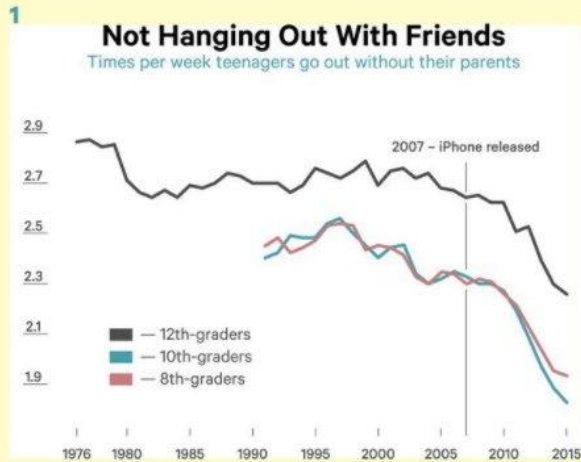
In-Person Relationships





# Data on our Relationships

The likely impact of technology on our relationships:



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# Origins of Mental Health Impact



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## Increased Access

- Kids **under 2 years old** average 42 minutes on social media
- **97% of teens** use the internet daily, averaging **3 hours per day**
- **69% time usage increase** since 2012, only continuing at **5% since 2020**



## Developmental Stage

- “**Rapid development** of the brain’s socioaffective circuitry” (NCMJ)
- **Increased sensitivity** to social feedback, and drive for social rewards
- “Likes”, “comments”, and more social media features **exploit our biological desires** through social comparison

# Mental Health Statistics

Correlating with high usage of social media...



13% of teens experience **depression**,  
32% experience **anxiety**



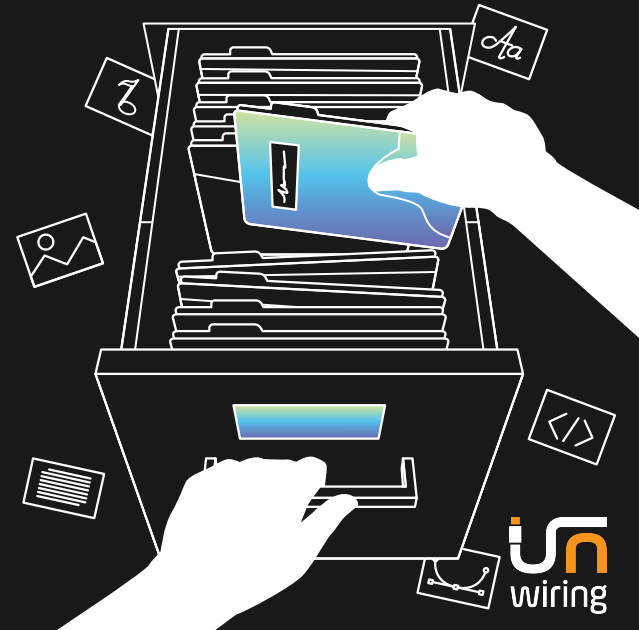
25% of 18-25 year-olds struggle with a  
**mental illness**



59% of US teens have experienced  
**online harassment** or cyberbullying



56% increase in **suicide** rates for 10-24  
year-olds between 2007 and 2017



# Mental Health Breakdown

## Issues

- ❖ Anxiety/depression
- ❖ Disturbed sleep
- ❖ Fear of missing out
- ❖ Cyberbullying
- ❖ Self-harm/suicide

However, some of these issues can be **reduced or prevented** through...

## Safe Practices

- ❑ Stronger peer relationships and support networks
- ❑ Questioning one's constant connectivity
- ❑ Building resistance to social media's impact

**Healthier** use can promote...

## Benefits

- Identity exploration
- Positive humor and entertainment
- Creative expression
- Connection with other identity-sharing community members
- Healthcare screening and prevention

# Social Isolation

After 2012 - 50% of Americans owned a phone

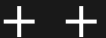
Physically Safer


- ❑ Fewer car accidents
- ❑ Fewer drinking-based illnesses

Emotionally More Vulnerable

- ❑ Skyrocketing rates of youth anxiety and depression

Social Isolation





Disinformation on Twitter spreads

# 6 times faster

than real information.



# Misinformation

Americans who spend *more time* listening to the news online, are more likely to *misjudge* the other party. In other words, people who are attempting to learn more about politics through social media, **are actually being sent further from the truth.**

Sometimes, social media isn't connecting us with like-minded people — **we're just being distanced from everyone else.**

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# Where's the Progress?



## Liberal Perspective

- ❑ Criticize big tech giants for promoting disinformation
- ❑ Add more company and political regulations



## Conservative Perspective

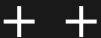
- ❑ Accuse tech giants of suppressing free speech
- ❑ Keep existing content guidelines and regulations

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# In Summary

1. **Tech 101:** the inner-workings of social media—the Attention Economy, Big Tech's ecosystem, and how the algorithm can manipulate users
2. **Social Media & Our Psychology:** the way in which social media exploits our brain's patterns and vulnerabilities—like the Ludic loop, a phenomenon that traps users in a state of loneliness without realizing it
3. **Negative Implications:** decreasing connectivity, increasing disinformation, and causing a youth mental health crisis



# THANK YOU!

Feel free to contact us anytime...

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