

- As you are watching this movie, take particular note of (including timestamps in the movie):
  - Any points you (strongly) agree with
  - Any points you (strongly) disagree with
  - Any points where you are not sure what is being claimed/argued
  - Who made those points, and their position/background
  - Whether these issues are IT-related or not (give justification)
  - One thing you did not know before watching the movie
  - One insightful conclusion in the movie (explain why)
  - One misleading conclusion in the movie (explain why)
  - Any issues where the movie changed your mind

## The Social Dilemma Notes

Left google in June 2017 due to ethical concerns, not just google but the industry at large. The tools at large tech companies give us many great benefits, help us connect to people and provide jobs and opportunities, however these tools have also a negative side.

“Theres no one bad guy”

“Never before in history have 50 designers, 20 to 35 year old white guys in California made decisions that would have an impact on 2 billion people, 2 billion people will have thoughts that they didn’t intend to have because a designer at google said this is how notifications work on that screen that you wake up to that morning. And we have a moral responsibility as Google for solving this problem” 1:25:14 remaining

“for the last ten years, the biggest companies in Silicon Valley, have been in the business of selling their users.” 1:21:32 remaining

“because we don’t pay for the thing we use, advertisers pay for the products that we use. Advertisers are the customers, we’re the thing being sold. If you’re not paying for the product then you are the product.”

“It’s the gradual, slight, imperceptible change in your behaviour that is the product” 1:20:08 remaining

“Everything you do online is being watched, is being tracked, is being measured, every single action you take is carefully monitored and recorded, exactly what image you stop and look at, for how long you look at it.” 1:18:02 remaining

“all of this data that we’re just pouring out all the time is being fed into these systems that have almost no human supervision, and that are making better and better and better predictions about what we’re gonna do and who we are” 1:17:01 remaining

At 1:13:00 remaining in the film it shows an interesting “scenario” of how these tech companies can get a hold of you and pretty much sell your “interest” it felt almost scary because the user is completely unaware, there is no integrity or honesty.

1:10:17 remaining the note on persuasive technology “We really want to modify someone’s behaviour, we want them to take this action.” “you pull down and you refresh its gonna be a new thing at the top, in psychology we call that positive intermittent reinforcement” “You don’t know when you’re going to get it, or if you’re going to get something, which operates just like the slot

machines in Vegas.” They want to go deeper and build habits that we make unconsciously, think of how I use youtube.

Growth hacking, “Teams of engineers whose job it is to hack people’s psychology, so that they can get more growth, they can get more user sign-ups, more engagement, they can get you to invite more people.”

“it’s not like they’re trying to benefit us, we’re just zombies, and they want us to look at more ads so they can make more money.” 1:07:00 remaining

“facebook conducted what they called massive-scale contagion experiments. How do we use subliminal cues on the facebook pages to get more people to go vote in the midterm elections. And they discovered they were able to do that. One thing they concluded is that we now know, we can effect real-world behaviour and emotions without ever triggering the user’s awareness, they are completely clueless.” 1:06:00 remaining

“you’re exploiting a vulnerability in human psychology. The inventors, the creators understood this consciously and we did it anyway.”

“we moved away from having a tools based technology environment to an addiction and manipulation based technology environment. That’s what’s changed, social media isn’t a tool that’s just waiting to be used. It has its own goals and it has its own goals, and its own means of pursuing them by using your psychology against you.” 1:04:00 remaining

I agree with the points they make, even though a lot of us know this shit is out there, we still can’t control ourselves, we saw the facebook massive court thing, and we still use it, we make memes about our data being stolen and just continue to fall victim to the same thing.

“These technology products were not designed by child psychologists who are trying to protect and nurture children, they were just designing to make these algorithms that were really good at recommending the next video to you, or really good at getting you to take a photo with a filter on it.” 57:00 remaining

- I like this point, from what he says it doesn’t seem so harmless at first, the goal was just to keep you interested, which can be seen as a positive thing
  - o Causes user joy
- However the means in which this is being done is through manipulation, which is never okay, the actual tool itself, isn’t bad it’s the people who purposefully try to control you using these same tools which are bad

“we curate our lives around this perceived sense of perfection, because we get rewarded in these short-term signals, hearts, likes, thumbs up, and we conflate that with value, we conflate it with truth, and instead what it really is is fake brittle popularity, that’s short term and leaves you even

more, and admit it, vacant and empty before you did it. Because then it forces you into this vicious cycle where you're like, what's the next thing I need to do now? Because I need it back"

- This point is incredible
- It's a drug addiction, you get a little taste and then you want more and more
  - o People base their youtube/twitch career on the above

"These services are killing people and causing people to kill themselves." Check out 51:47 remaining, When it came to children growing up, we used to have protections, "when children watched Saturday morning cartoons, we cared about protecting children, we would say, "you can't advertise to these age children in these ways. But then you take youtube for kids and it gobbles up that entire portion of the attention economy, and now all kids are exposed to youtube for kids, And all those protections and all those regulations are gone."

50:37 remaining "photoshop didn't have 1000 engineers at the other side of the screen using notifications, using your friends, using AI to predict what's gonna perfectly addict you or hook you, or manipulate you, or allow advertisers to test 60,000 variations of text or colors to figure out what's the perfect manipulation of your mind."

"algorithms are opinions embedded in code, and algorithms are not objective, Algorithms are optimized to some definition of success. So if you can imagine if a commercial enterprise builds an algorithm to their definition of success, it's a commercial interest, it's usually profit." 47:00 remaining

- Is there an ethical dimension to an algorithm? If I design an algorithm am I doing something ethical or unethical? All I'm doing in reality is writing code that changes 1's and 0's, but in turn this has an effect.

At 43:55 in the movie an interesting question is asked by one of the "controllers", "do you guys ever wonder if the feed is like good for ben" and the other 2 laugh ti off and say "no" you can see here clearly there is an ethical dimension, do we have our clients best interest in mind, but knowingly they do this for their own self interest over the self interest of their users.

"So imagine you're on facebook and you're effectively playing against this artificial intelligence that knows everything about you, can anticipate your next move, and you know literally nothing about it, except that there are cat videos and birthdays on it. That is not a fair fight"

- I disagree with this, it is a fair fight, you knowingly use these services, and at the end of the day each human has to make their own decision, we make it out like the tool is the issue, the tool is not the issue, it is being controlled by the issue, you could use this for good you could say "I will build an AI that knows everything about you, and do all that, but its goal is to look out for you rather than sell your data" and in this case, this tool we call bad, is now good. It's not us fighting the AI, we fight the people who are running it on us with these bad intents.

TECH RELATED ISSUE 39:18 remaining

"personalized feeds/results"

"when you go to google and type in "climate change is", you're going to see different results depending on where you live. In certain cities you're gonna see it autocomplete with "climate change is a hoax." In other cases you're gonna see "climate change is causing the destruction of

nature.” And that’s a function not of what the truth is about climate change, but about where you happen to be googling from, and the particular things google knows about your interests.

Everything we do and see online is based off computers that calculate what it thinks is perfect for each one of us.

“over time, you have a false sense that everyone agrees with you, because everyone in your news feed sounds just like you. And that once you’re in that state, it turns out you’re easily manipulated, the same way you would be manipulated by a magician.” 37:00 remaining.

In this here we basically live in a bubble, and when we can’t get outside contradicting views or discussions, we become almost delusional.

Check out this for another tech related issue 35:35 remaining

“At youtube, I was working on youtube recommendations. It worries me that an algorithm I worked on is actually increasing polarization in society, but from the point of view of watch time, this polarization is extremely efficient at keeping people online. People think the algorithm is designed to give them what they want, only it’s not, the algorithm is actually trying to find a few rabbit holes that are very powerful, trying to find which rabbit hole is the closest to your interest, then if you start watching one of those videos then it will recommend it over and over again.”

- The guy himself from what he says shows that he didn’t intend for his algorithm to polarize society, he says it worries him that something he did is causing harm, accountability

33:40 remaining – pizza gate another tech related issue, the idea that ordering a pizza was like trafficking a child.

The effect of the rabbit hole and what it can do

If the algorithm believed you were someone who believed in conspiracy theories, facebook engine served them pizza gate groups, this eventually culminated to a man with a gun who decided he would liberate the children in the basement of the a pizza place that did not have a basement. “Pizzagate is an example of a conspiracy theory that was propagated across all social networks, The social networks own recommendation engine is voluntarily serving this up to people who had never searched for the term pizzagate in their life.”

32:00 remaining onwards – fake news another tech related issue, fake news sells, the truth is boring, doing the right thing is much harder and generates less profit

“we’ve created a system that biases towards false information. NOT BECAUSE WE WANT TO but because false information makes the companies more money. Than the truth, the truth is boring”

“it’s a disinformation for profit business model, you make money the more you allow unregulated messages to reach anyone for the best price. Facebook has trillions of these newsfeed posts, they can’t know whats real and true which is why this conversation is so critical right now.”

This shit is crazy, people are committing acts of violence, blowing up actual physical cell phone towers that emit 5g, Russia and hcina are spreading these rumors that caused panic and protests.

27:00 remaining "facebook gave a new way for military men and other bad actors a new way to manipulate public opinion and to help incite violence against the Rohingya Muslims, that included mass killings, burning of entire villages, mass rapes, and other serious crimes against humanity that has led to over 700,000 Rohingya Muslims having to flee the country."

26:21 remaining "it's not that highly motivated propagandists haven't existed before, it's that the platforms make it possible to spread manipulative narratives with phenomenal ease, and without very much money."

"If everyone is entitled to their own facts, there's really no need for compromise, no need for people to come together. In fact there's really no need for people to interact. We need to have some shared understanding of reality, otherwise we aren't a country." – living in a bubble caused by these tech companies.

17:00 remaining, it's difficult to see the threat of technology when using it, your scrolling through see a video that makes you laugh and you ask "where's the existential threat," this isn't a simple problem to solve because even seeing it is difficult. "It's not about technology being the existential threat, it's the technology's ability to bring out the worst in society and the worst in society being the existential threat. If technology creates mass chaos, outrage, incivility, lack of trust in each other, loneliness, alienation, more polarization, more election hacking, more populism, more distraction and inability to focus on the real issues, that's just society, and society is incapable of healing itself and devolving into chaos."

THIS IS A GROWING PROBLEM.

13:00 remaining

A lot of people see this as a 1-sided problem "technology is ruining the world," that's not the case. Technology is confusing because it's both a utopia and dystopia at the same time, you can hit a button on your phone and a car shows up in 30 seconds to take you where you need to go, that is magic and that is amazing, when they made the like button the motivation was "can we spread positivity and love in the world, when we fast forward to today the idea teens would be depressed if not getting enough likes or political polarization was never on their radar," I don't think these guys set out to do evil, it's just the business model that has a problem."

12:00 remaining, talking and concluding the whole topic, how do we fix it? What do we do?

"I think it's okay for companies to be focused on making money, but what's not okay is when there's no regulations, no rules and no competition, and the companies are acting as sort of de facto governments. And then they are saying well we can regulate ourselves, which is a lie, it's ridiculous."

"There's no fiscal reason for these companies to change, that's why they need regulations"

7:00 remaining "we build these things, and we have a responsibility to change it, the attention extraction model, is not how we want to treat human beings, the fabric of a healthy society depends on us getting off this corrosive business model. We can demand that these products be designed humanely, we can demand to not be treated as an extractable resource. The intention could be "how do we make the world better.""

Not everyone realizes this is a problem, it's not ethical to hide stuff from general public, you need to be clear and honest! -> strongly disagree.

Things I agree on,

1. The manipulation of people

Disagree with 1 conclusion

1. Not everyone realizes this a problem, its not ethical to hide stuff from general public, you need to be clear and honest!
  - a. I think that a lot of people know this is a problem, but rather don't have any alternatives due to the fact that there's no competition, or no reason to behave better
    - i. People leave, where do they go? Nowhere, you don't support youtube, your gonna stop using youtube? Your gonna just stop using these services? You don't have the luxury right now to say "Screw youtube im going to x" and if you do, x is usually corrupted too
    - ii. Even when mark zuckerburg was taken to this court and had to make a statement, people knew but nothing changed, facebook still grew, people still use it, we know it's a problem but we don't care
  - b. I think

Points I strongly agree with

"we moved away from having a tools based technology environment to an addiction and manipulation based technology environment. That's what's changed, social media isn't a tool that's just waiting to be used. It has its own goals and it has its own means of pursuing them by using your psychology against you." 1:04:00 remaining

1:10:17 remaining the note on persuasive technology "We really want to modify someone's behaviour, we want them to take this action." "you pull down and you refresh its gonna be a new thing at the top, in psychology we call that positive intermittent reinforcement" "You don't know when you're going to get it, or if you're going to get something, which operates just like the slot machines in Vegas." They want to go deeper and build habits that we make unconsciously, think of how I use youtube.

Points I strongly disagree with

27:00 remaining "facebook gave a new way for military men and other bad actors a new way to manipulate public opinion and to help incite violence against the Rohingya Muslims, that included mass killings, burning of entire villages, mass rapes, and other serious crimes against humanity that has led to over 700,000 Rohingya muslims having to flee the country."

32:00 remaining "we've created a system that biases towards false information. NOT BECAUSE WE WANT TO but because false information makes the companies more money. Than the truth, the truth is boring"

"it's a disinformation for profit business model, you make money the more you allow unregulated messages to reach anyone for the best price. Facebook has trillions of these newsfeed posts, they can't know what's real and true which is why this conversation is so critical right now."

- **Consider a range of IT-related points/issues raised in the movie and explain in precise terms:**
  - **Why the issue is IT-related**
  - **What point/conclusion is being made, if any**
  - **What evidence is supplied in support of the point/conclusion, if any**
  - **What argument is presented in order to derive the point/conclusion, if any**
  - **Whether that argument is convincing, and why or why not**
  - **What ethical reasoning can be used to support/undermine the point/conclusion**

## IT Issue

Manipulation of users through means of software algorithms designed by humans to keep you hooked onto social media.

- It is an IT-related issue because the software being designed supposedly has the intent to exploit the interest of the users with the intent to benefit one's self interest
  - "we moved away from having a tools based technology environment to an addiction and manipulation based technology environment. That's what's changed, social media isn't a tool that's just waiting to be used. It has its own goals and it has its own goals, and its own means of pursuing them by using your psychology against you." 1:04:00 remaining – by: [Tristan Harris](#) (Former design ethicist at google)
- The point and conclusion being made is that these technologies are purposefully designed in order to manipulate its users into spending as much time, and understanding them fully inside and out so that it can predict them, and subtly change how they think and act, all without the user's knowledge.
- No real evidence is supplied besides the consequences and his view, he provides this point as a logical conclusion from analysing how social media works, this is just his opinion on the situation
  - The quote + slot machine example
- The argument is convincing, despite the lack of hard evidence, the reason it was convincing was that, 1. He seems like an ethical person especially when he described how he tried to make a change, he has no bad intentions. 2. The logical flow of what he says makes sense, and to an extent it can be observed that this is happening, youtube recommended pages are tailored to you and your psychology, likewise with your facebook feed etc.
- When seen from either a Kantian or a consequentialist perspective, this conclusion can be supported, the intention to manipulate and design these tools purposefully to manipulate and exploit users is wrong, from a Kantian perspective if everyone did this, then this would lead to a society that does not trust each other. From a consequentialist perspective, the consequences of this kind of technology is that users become addicted and are being exploited for the self interest of these corporations

## Propagation of fake news being amplified by social media, actually encouraged by the algorithms designed as they bias fake news

- It is an IT related issue as the technology can be seen as the “root of this problem” it is the direct “cause” of the fake news being amplified, and plays a central role, and this again is being done to promote self interest at the expense of others
  - o 31:47 remaining “we’ve created a system that biases towards false information. NOT BECAUSE WE WANT TO but because false information makes the companies more money. Than the truth, the truth is boring” - by: Sandy Parakilas (Facebook former operation manager)
  - o 31:30 remaining “it’s a disinformation for profit business model, you make money the more you allow unregulated messages to reach anyone for the best price. Facebook has trillions of these newsfeed posts, they can’t know whats real and true which is why this conversation is so critical right now.” [Tristan Harris](#) (Former design ethicist at google)
- The conclusion/point being made is that these technology companies don’t try to do anything or care about fake news as it’s harder to solve the problem and if theres no real repercussion for the companies, nothing will stop them. They even go to the extent of saying this is intentional as the truth is boring and fake news sells babyyy
- No evidence is being provided to support this information, and in fact I disagree with this point being made at whats being portrayed across.
  - o The quote + the examples of fake news causing harm
- The argument to me is not convincing as “fake news” itself is a much more delicate issue, there is currently no system in the world besides an informed human who can tell the difference between real and fake news, a machine would struggle to tell what is real and fake to an extent. It seems to me that these companies didn’t intend for fake news to grow rampant and be spread across their platforms, its just a consequence of such larger user base and the inability to monitor every single form of “fake news.” When facebook made a statement about the movie’s claim that they spread fake news, they said it was never their intention, this is just a side-effect and they are working on fixing this issue
- When seen from a Kantian perspective, the point is being discredited as this would depend on the intention of the companies, had they made these systems with the intent to spread fake news for self gain, then this point would be supported, but as it seems the intent is not to do this, so the point would be discredited. However from a consequentialist perspective, this point is being heavily supported as the consequences of the “fake news” has led to instances such as pizza gate scandal, manipulation of election outcomes and countless other instances where people could use fake news to push their agenda to millions worldwide.

## Polarization of society being fuelled by social media and the technologies

- It is an IT related issue, as the cause of this issue is the technologies behind it, the polarization can be seen as a consequence of social media
  - o “At youtube, I was working on youtube recommendations. It worries me that an algorithm I worked on is actually increasing polarization in society, but from the point of view of watch time, this polarization is extremely efficient at keeping people online. People think the algorithm is designed to give them what they want, only it’s not, the algorithm is actually trying to find a few rabbit holes that are very powerful, trying to find which rabbit hole is the closest to your interest, then if you start watching one of those videos then it will recommend it over and over again.” – By



(Guillaume Chalot (Youtube former engineer who worked on search algorithm)  
founder of algotransparency

- The point being made here is that, social media and technologies such as youtubes, although when designed had the intention to recommend you stuff to keep you on their platform, has shown to have the effect of polarizing society and causing discourse. The engineer who gives this quote points out that this was not his intention, it just happened that the technology favoured this polarization which led to it being exploited.
- The evidence being provided is the fact he is the person who worked on this algorithm. I agree with what he says
- This argument to me is extremely convincing as it has been shown that controversy or anything that causes discourse tends to go viral on the internet, as this keeps people talking about it and keeps it relevant and this in turn keeps you on the platform watching this content. Part of what makes it convincing as well is that he is one of the people who developed this algorithm and is no longer required to keep quiet about this. I feel as though another point he tried to make was that this was not the intention, it had the goal to keep you hooked, but the way you got hooked was in a bad way, so who is bad, him or the algorithm?
- From a Kantian perspective, This man's point is being supported, the intentions were not to cause polarization and they wanted to develop something for the good of their users, and keep them interested and happy on their product, however due to the "thing" that keeps people interested also causing harm, this is a side-effect, it just happens that content that causes polarization is one of those "things." From a consequentialist perspective however, his point is discredited, as regardless of the intentions, the outcome has caused more bad for the general public than good, therefore he should be held accountable along with the people who okayd this.

The intention to send users down rabbit holes to keep them as occupied as possible rather than giving them "what they want"

- The reason this is an IT related issue, is that IT is being used as the means to fuel destructive behaviours, they used an exploitation in a "certain type" of person to suggest them something that would keep them hooked, almost as if they are gas lighting this person for their own personal gain
  - o 33:40 remaining – pizza gate another tech related issue, the idea that ordering a pizza was like trafficking a child. : by Renee Diresta, Research manager at Stanford Internet observatory
- The point being made is that these companies know how people are and what they think, and they will try to use this to suggest to you things that would get you to use their product more and more or potentially even change how you think. They took advantage of the weaknesses of their users to benefit their self interest of keeping you on their platform and busy on it as long as possible.
- The evidence provided was the pizzaeria gun fire incident over a fake news incident about pizza gate. Other evidence not provided is issues such as mis-information being spread about covid-19 vaccinations, anti-vaxxing, flat earth believers etc.
- The argument to me is very convincing in the portion where she says "they took advantage of the weaknesses of their users to benefit their self interest" only because "taking advantage" is just recommending you content you enjoy, I believe its on the person and his weakness in characteristic, should they do this? No, can they do this? Yes. Their main goal is to recommend you content YOU enjoy, and they can't supervise that process, so these

algorithms will give you this stuff and you're the one eating it up, the tech companies aren't just there intentionally giving it to you.

- From a Kantian perspective this once again raises the question, what was intent, did they know that this would happen, or have malice in their intent? Or was this a unintended and unforeseen consequence? Most likely I feel this is not a malefic intent, This is due to the fact that its not humans running these algorithms, these algorithms are just designed with the premise "keep the user hooked" but no where inside does it say, yes add more to the fake news part, add more to the controversies, this is just what happens to be popular, and at that point society becomes the one to blame for this, for giving too much attention to negative things (any attention is positive for anyone). From a consequentialist point of view, their point is being heavily supported, the culmination of the fake news has led to many incidents, e.g. white house being stormed due to believing rigged election resulting in a death, the pizzagate incident, and many other things.

The effect of the rabbit hole and what it can do

If the algorithm believed you were someone who believed in conspiracy theories, facebook engine served them pizza gate groups, this eventually culminated to a man with a gun who decided he would liberate the children in the basement of the a pizza place that did not have a basement. "Pizzagate is an example of a conspiracy theory that was propagated across all social networks, The social networks own recommendation engine is voluntarily serving this up to people who had never searched for the term pizzagate in their life."

Deficiencies in the films arugmeentation

- Lack of evidence being shown
  - o Although this might be due to it being impossible to obtain, but then again it just means we cant take this at face value
- The film is not really having a discussion, its one sided, we only hear the perspective that these technologies are wrong and unethical, however we never hear the other side, we only get the negative consequences shown, not the good either
- I feel the film doesn't drive home the point that the technology itself isn't the thing we should hate and blame, it's simply a tool just like a knife is a tool, you can use a knife to make a 3 michellin star steak, or you can use it to kill someone, the only difference in these situations is what the person using it chose to do.
- The movie presents the issues as problems as if there are black and white solutions to all these issues, however this is clearly not the case, this is a dilemma where they attempt to give black and white solutions.
- Generalising society

Counter arguement

- Fake news point using ethical reasoning <- I also disagree with this, Kantian perspective, unintended side-effect, facebooks comment on social dilemma
- Slot machine point, that the intent is malicious to keep you hooked is malicious? Is getting content you enjoy malicious?
- "The idea that we allow misinformation to fester on our platform, or that we somehow benefit from this content, is wrong," Facebook said

Friday, arguing against suggestions in “The Social Dilemma” that it spreads fake news, hate speech and misinformation. Facebook said it has more than 70 fact-checking partners and that it has removed more than 22 million pieces of hate speech. Still, misinformation has proven to be a game of whack-a-mole for Facebook, which consistently needs to find and remove it. Source:

<https://www.cnn.com/2020/10/02/facebook-rebuts-the-social-dilemma-popular-netflix-documentary.html>

- We should have conversations about the impact of social media on our lives. But ‘The Social Dilemma’ buries the substance in sensationalism.
- For example, in 2018 we changed our ranking for News Feed to prioritize meaningful social interactions and deprioritize things like viral videos. The change led to a decrease of 50M hours a day worth of time spent on Facebook. That isn’t the kind of thing you do if you are simply trying to drive people to use your services more.
- <https://about.fb.com/wp-content/uploads/2020/10/What-The-Social-Dilemma-Gets-Wrong.pdf>
- Facebook argues the platform doesn’t intend to manipulate you, this is one way it can be seen, but