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## Summer Playlist 2023 | Episode 7

Frances Haugen, Advocate for Accountability and Transparency in Social Media & Author of *The Power of One*

**On the final installment of our Summer Playlist, we welcome Frances Haugen into the SmarterMarkets™ studio. Frances is an advocate for accountability and transparency in social media and the author of the memoir, [The Power of One: How I Found the Strength to Tell the Truth and Why I Blew the Whistle on Facebook](#). SmarterMarkets™ host David Greely sits down with Frances to discuss the algorithms designed to capture our attention, their flaws, and how we can incentivize change and build better social networks.**

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**Frances Haugen** (00s):

You know, a world in which every little change to an algorithm had to be approved by the federal government, I think it would be a world that wouldn't necessarily be good for consumers. But I do think we have to live in a world where companies cannot be rewarded for cutting corners. Right now when Elon Musk fired a safety team, Mark Zuckerberg fires a safety team, there are no consequences because no one actually can tell how the product changed. But even a small amount of transparency, that would be a much more obvious trade off, and the companies would think a lot harder before they would cut those corners.

**Announcer** (32s):

Welcome to SmarterMarkets. A weekly podcast featuring the icons and entrepreneurs of technology, commodities and finance ranting on the inadequacies of our systems and riffing on ideas for how to solve them. Together, we examine the questions: are we facing a crisis of information or a crisis of trust, and will building Smarter Markets be the antidote?

This episode is brought to you in part by Abaxx Exchange, bringing you better benchmarks, better technology and better tools for risk management.

**David Greely** (01m 11s):

Welcome back to the final episode of Our SmarterMarkets Summer Playlist 2023, where we're sitting down with our special guests midway through the year to talk about where we are and where we might be and need to be heading next. It's our beach reading in a podcast. I'm Dave Greely, chief Economist at Abaxx Technologies. Our guest today is Frances Haugen, well-known as the Facebook whistleblower. Frances is an advocate for accountability and transparency in social media, and author of her memoir, *The Power of One*. We'll be discussing the algorithms designed to capture our attention, their flaws, and how we can incentivize change and build better social networks. Hello, Frances. Welcome to SmarterMarkets.

**Frances Haugen** (01m 53s):

Hi. Thank you for inviting me.

**David Greely** (01m 55s):

Well, really glad you're able to make time to be with us today, because I wanted to talk to you about so much of what's happening in the attention economy and its impact in our lives you know, we find ourselves living more and more in an attention economy, one where our attention is one of the most highly valued commodities, and you've been out front and outspoken in exposing the harmful effects that can be caused by social media companies, their business strategies and their algorithms as they strive to gain and hold our attention and the fact that they know, and that they understand these harmful effects, but in many cases do nothing and so, I'd like to begin today talking with you about two of these harmful effects, conflict and addiction but you know, please, as we go, let me know if there's others that we should be discussing and I wanted to start with conflict, because I believe your concerns about the role that social media was playing in fostering conflict and inflaming violence and instability in Myanmar and Ethiopia first led you to blow the whistle on what was happening at Facebook. Now, journalists and newspaper editors have known for a long time that conflict gets people's attention. But what is it about social media that has made the problem so much bigger?

**Frances Haugen** (03m 14s):

I would say there's, there's two kind of components to what I was kind of concerned about when I came forward. So the first is, Facebook has been very open since at least 2018, that when you have algorithms that reward content, that gets interaction. So this is often called engagement based ranking. That content that is more extreme is more likely to get a click. So, you know, the shortest path to a click is anger. The shortest path to a click is hate. They said, you know, don't worry about this though. We have these amazing AI's you know, I always like to joke when a billionaire tells you, don't worry, AI will save us. You should always be really suspicious. They said, don't worry about this tendency of these machine learning systems because we can go and pluck out the bad things. Like we may be disproportionately amplifying the extreme content that's okay.

**Frances Haugen** (04m 05s):

Because we can take down whatever's violating. The part that they didn't explain to people was that the English language version of Facebook wasn't representative of what people around the world were experiencing. That when we focus on safety after the fact, you know, plucking down content that we consider violating, we have to rebuild those safety systems language by language, by language, which doesn't scale economically, at least the way they're built today and in a world where companies don't have to be forthright about the different safety systems they have in different languages, you can end up in a situation like we saw in Myanmar where there were no safety systems written for Burmese until after the genocide began.

**David Greely** (04m 43s):

That's pretty amazing. So once again, we, we find that we don't, not everyone's looking at the same screen around the world.

**Frances Haugen** (04m 51s):

Exactly.

**David Greely** (04m 52s):

And I wanted to ask you get into a little bit more about how these algorithms can create conflict. It sounds like it, it's known just kind of, if you're gonna see what people engage with and base your algorithms on that human nature being what it is, you're gonna get conflict and that's gonna be what's creating engagement. Are there a way to change the algorithms to make them less prone to promoting conflict or is it just you have to have the overrides?

**Frances Haugen** (05m 19s):

I would say that it's, it's not just the algorithms. It's what the algorithms allow us to do in terms of other design choices as well. So if we were living with a version of Facebook that was just like what the product was in 2011, when the first algorithm began to sort our news feeds, you know, it wouldn't have been that big a deal because back then they weren't actively pushing us into mega groups with a hundred thousand, half a million, 5 million members. Because when you have people in these mega groups on one side, it means your feed is always full. There's always more content for you to consume. You know, you can spend all day on Facebook and they'll keep showing you new things. But on the flip side, now you are completely reliant on an algorithm to sort through that mountain of content that that fire hose of content each day and only show you some of it.

**Frances Haugen** (06m 10s):

And that's what amplifies the, the biases in the algorithms to start, the thing I always advocate for is what I call human scale social media. So if we were to roll back in time to 2000, or even further back, like say 1990, we had social media all the way back then before we had algorithmic home feeds. But it was done at something that was at a more human scale. You know, you could have a bulletin board system that had tens of thousands of members or something that's like a Discord or Slack server, we called it IRC back then, they could also have tens of thousands of people, but we didn't have systems where one person could say something and you get sent out to 5 million people instantaneously because it was the most extreme thing that was said that day. So when we move towards having, designing systems with the intention of having humans direct our intention, instead of having computers direct our intention, we can facilitate different kinds of conversations, different kinds of community.

**David Greely** (07m 07s):

And, and for those of us, well, I was around back then for, for those of our audience who weren't as engaged back then, what did it look like when it was more human directed rather than algorithm directed because to be honest, it's a little hard to remember.

**Frances Haugen** (07m 19s):

You know, if I think if you pulled the average millennial or Gen X or Boomer, and you said, what is Facebook for. They would say it's for keeping in touch with my family and friends. You know, back even in 2008 when we got our first feed on Facebook, you know, before 2008, Facebook was literally, you know, almost like a scrapbook. You know, you could put pictures up, you could say things about yourself, people would navigate between different pages but when we got that first feed, suddenly it was mostly updates from your family and friends. One of the things that made people so upset when Facebook switched from a chronological feed to an algorithmic feed was that they now didn't know when they were done you know, before you could show up for Facebook, consume it for 10, maybe 20 minutes, get all the new updates, it was kind of like your email inbox.

**Frances Haugen** (08m 08s):

You know, if you want to inbox zero, you know, you read down to the, the bottom of the new updates, and then you're done. When we move towards having algorithmically mediated conversations, algorithmically mediated interactions with the world, they're endless. That's why companies really like them you know, you can continuously show more and more content to someone. They can be on for hours and hours and hours a day and look at ads that whole time. But now the content you're looking at, you will likely not know who created it. You won't know necessarily why you're seeing it or how to influence, how to get more or less of content you like or don't like.

**David Greely** (08m 44s):

That's such an important point, the fact that the, the story never ends. there's no beginning, middle, or conclusion and as you said, it's certainly the, the social media companies. That's good for the bottom line in that it promotes engagement, sell ads make dollars. So it seems like the social media industry doesn't really have the incentive to address this issue. Are there ways where we could give them the proper incentives?

**Frances Haugen** (09m 11s):

So people often ask me, how do we move forward. What kinds of laws or other kinds of oversight could lead to different systems of social media in general? There's two major schools of how you can govern social media or any kind of technology. One is you draw fences and you say, you cannot cross this line. Like, these are the prohibited things for you to do and the problem with that is technology is quite fluid. People figure out lots of different ways to accomplish the same end. And technology companies just run around the fence. The other way is to say, Hey, you need to, we, we believe the thing that was the fundamental problem with social media was that there was an information asymmetry that you understood that no one could really see what was happening behind the curtain and as long as you kept the curtain closed, as long as you didn't answer questions, you can make whatever choices, whatever trade-offs you wanted, and no one would see the consequences of them.

**Frances Haugen** (10m 05s):

They might live the consequences of them, but they wouldn't know for certain that was happening and to give you a little bit of context on how different the current world is from the world that we were living in before, I know it may sound crazy, but I could sit down with you for three weeks and I could teach you enough programming that you could ask meaningful questions about how Google operates, you know, what domains, what kinds of pages are shown more or less, how do different kinds of queries get different kinds of results. That's because in general, you and I see the same version of Google. There might be a little bit of customization you know, if you're in Seattle and you search for zoo or in San Diego and you search for zoo, you might be shown a different zoo as your first result.

**Frances Haugen** (10m 45s):

But in general, for most queries, people get basically the same results when it comes to social media. Every single one of us sees a different thing and so to accomplish that same level of like accountability 101, we would have to recruit 20,000 people and convince them to let us install software on their phones, on their laptops, just so we could see a representative experience of social media. The second school of thought says, okay, if that asymmetry, if that, you know, the fact that it's an order of magnitude, maybe two orders of magnitude harder to ask those basic accountability questions of Facebook than Google. If that's playing out in some of these consequences, then we should be addressing that information asymmetry as the core of our regulations. So the European Union passed a law called the Digital Services Act, which says, you need to tell us what the risks are of your products. You need to tell us what your plan is for mitigating those risks and if we ask you a question, you need to answer it, which sounds super basic, but right now, nowhere else in the world do people have the right to ask questions to do research on social media platforms, except in Europe.

**David Greely** (11m 53s):

And, and that's really, as you said, it's just asking for basic transparency into the processes. What is the pushback from the social media companies on that?

**Frances Haugen** (12m 00s):

I think on one level, they worry about things like just the cost of, of compliance, right. Like they've run on Facebook has run on very, very lean teams for years for a variety of reasons. I think the secondary thing is that historically, when Facebook has had to tell the truth or when the truth has come out, Facebook has had to spend more on safety. So I'll give you an example. If you knew that Facebook didn't have safety systems in your language, you would likely put pressure on Facebook to fix that. So for example, around this time last year, maybe a month or two earlier, I went to a conference in Norway, and two journalists came up to me and said, we recently did a quite in depth piece of investigatory reporting about a suicide glorification cluster on Instagram.

**Frances Haugen** (12m 49s):

So there were hundreds of accounts of young women in Norway who were celebrating self-harm. So imagine a black and white photo with train tracks and the caption, today's a great day to die. Stuff that very clearly violates Instagram's policies against promoting self-harm. We went to a policy person for Facebook in Scandinavia and said hey, we found, here's a thousand posts that are very clearly violating your policies. Why are they up on the platform? And the policy person said, I can't do anything with this. You have to go report these. That's the only way we can take them down. So they went and reported all a thousand, made a spreadsheet, came back in a couple months, and all of those posts were still up. And they were like, Francis, how is it possible that this happened? And, and pretty, pretty likely it's because there wasn't a content moderator who spoke Norwegian and who was assigned to look at self-harming content.

**Frances Haugen** (13m 42s):

Remember, there's only maybe 5, 6, 7 million people in the world who speak Norwegian, right. In a world where the Digital Services Act has access to face even basic data, we should expect Facebook to have to pay substantially more for safety, because today they can cut those corners and there's no consequences. There's no repercussions and so we, we saw an example of this in the wake of my disclosures back in 2021, for about a year, Facebook doubled how much they spent on safety in response to that. But unfortunately, when Elon Musk took over Twitter and demonstrated you could fire most of your safety team, and there'd be no consequences, Mark Zuckerberg has been quite clear that he feels like Elon Musk show that you could rip the bandaid off in his words and really minimize teams, and that there would be no blowback. And so we're seeing, unfortunately, the consequences of, of living under an opaque system.

**David Greely** (14m 35s):

Right and I had a question in this really sad example of self-harm in Norway. Like part of it is they didn't take it down is another part did it make it easier for girls who had this on their mind to find the content somehow?

**Frances Haugen** (14m 52s):

Totally or even worse. The nature of these algorithms is, it's not just that they reward, say, hate or anger, it's that they push people towards more extreme versions of the same idea and so, I'll give you an example. I was speaking with a journalist, another journalist. I talked to a lot of them. One of the things I never thought I'd come to appreciate when I came out as a whistleblower was that journalists really love to gossip. Like they, they tell you all these stories about themselves and about other people and all these things, but I had, I had a journalist ask me as part of an interview. He said, Francis, I just had a baby. You know, healthy, happy baby little boy. We made an Instagram account for that baby. It has five baby friends. We're all family acquaintances. All the pictures on all of those accounts are healthy, happy babies.

**Frances Haugen** (15m 42s):

The only thing I've ever clicked on, put a comment on, put hard on is healthy, happy babies and yet, 10% of my feed is suffering children. It's kids who are in hospital beds, who have tubes coming out to them and look and are dying of cancer. It's kids with visible deformities, kids who've been in horrible accidents. How did this happen, how did we get from healthy, happy babies to these suffering children and in the case of, you know, a child who is not actively looking for self-harm content or this new father, the algorithm doesn't really understand the significance of the content is showing you. You know, if you have a kid who's starting to look at maybe a little bit more depressing content, the algorithm could say the next, the, you know, people who like depressing content, you know, they'll dwell, they'll hit like, on content that is about self-harm.

**Frances Haugen** (16m 33s):

Or in the case of the new father, you know, people who really liked babies and it was quite clear from all of the interactions that he had done, all the images that he looked at that he liked. Babies, people who like babies, can't stop themselves from, from looking at dwelling on images of suffering children. And so that's one of the unfortunate things about these systems is that when we just assess them numerically, things fall through the cracks like this, and you can end up in a situation where, you know, that journalist was an adult, he could see that something odd was going on. He could see that the algorithm had decided to push him towards that more extreme content. If you were a 13 year old girl and you were feeling kind of isolated and depressed, would you realize that the algorithm had pushed you into a whole another level of danger.

**David Greely** (17m 17s):

And it makes me think we have a, a food and drug administration in the United States that has to approve drugs before we put them into our bodies. Do we need some sort of regulatory approach to approve algorithms before we put them into our social media bloodstream and into our minds, do we need to have somebody looking at these things to say, how harmful is this?

**Frances Haugen** (17m 42s):

So I am a big proponent of innovation in the free market and right now we are living in a world where we can't innovate our way out of our current circumstances, because when people make new versions of these systems, the only thing the consumer has to compare them on is marketing messages. When it comes to things like food. So medications are slightly different set of circumstances when it comes to food. The food and Drug Administration doesn't tell us what to eat for dinner, but it does tell manufacturers, Hey, if you say these ingredients are in your food, they actually need to be in the food. You know, you need to disclose how much trans fats there are in how you prepared this. because Trans fats are cheaper. They make it more shelf, shelf stable, you know, but they also have serious health consequences.

**Frances Haugen** (18m 30s):

Sometimes just making it clear to consumers, give consumers real choices. That's enough to actually lead to pretty dramatic swings in the market and so I'm, I think with the place that we're at right now is, you know, world in which every little change to an algorithm had to be approved by the federal government. I think it would be a world that wouldn't necessarily be good for consumers but I do think we have to live in a world where companies cannot be rewarded for cutting corners. You know, right now when you know Elon Musk fired a safety team, Mark Zuckerberg fires a safety team, there are no consequences because no one actually can tell how the product changed With even a small amount of transparency. That would be a much more obvious trade off. And the companies would think a lot harder before they would cut those corners.

**David Greely** (19m 16s):

Right I wanted to turn to the second harmful effect, which is addiction. You know, you brought up people who tend to get depressed will ruminate on images, and you know, the, the example of unhealthy babies, teenagers who get depressed might look at content for a long time and addiction's certainly one way to hold people's attention. We know that and I'm curious, you know, how addictive is social media are we looking at a problem on the scale of what we had to deal with cigarettes?

**Frances Haugen** (19m 45s):

So right now, the Surgeon General says that one in three teenagers say that they are on their screens till midnight or later most school nights, which means that like 10% of kids are on until probably 2:00 am maybe 3. When it comes to things like cigarettes, this is one of the things that kind of floors me, you know, quote, only 10% of people who smoke ever get cancer and they get to enjoy smoking for decades and decades before. Usually the health consequences catch up with them. In the case of social media, Facebook themselves at, say, Senate hearings will say things like, you know, four out of five kids are fine online, they're fine on social media, they're fine on Instagram, which means that one in five kids are not okay and I think one of the questions we need to ask is, you know, who are the kids who pay the highest costs?

**Frances Haugen** (20m 34s):

Are the ways of doing harm reduction on these systems, so for example, it looks like right now based on, on pretty extensive studies, that there are two danger windows for children. One is between the ages of 10 and 13, and another is when kids leave home, you know, they go off to college, they get their own apartments, they leave the nest, you know, a really simple intervention given that the children who have the most trouble with self-regulation are usually the younger kids, would be to come in and say, you have to be 14, you have to be 15 before you can use social media. You know, we're gonna do a good job of actually detecting and keeping kids off these

systems. Because right now, even if only say 10% of kids are, are channeling their anxiety into doom scrolling, if only 20% of kids are, you know, being led by algorithms or are unable to resist when they're led by algorithms towards eating disorders, self-harm content, ruminating on depressing topics, that's still a huge fraction of society.

**Frances Haugen** (21m 31s):

And I think the other issue that I'm quite worried about is that when you pull kids and you say, Hey, like, can you tell me, like, do you, do you like social media. Does it make you feel good. The kids say no. They say like, I can tell, it makes me anxious. I can tell it makes me depressed, but I also can't stop using it and if I leave, I'll be ostracized. You know, we will say like, if you could wave a magic wand and your younger sibling would never use it, would you do that? The kids say yes and so that seems to be circumstances where we need to have a conversation of why is this happening and is there a, you know, collective action problem where we do need to intervene at a higher level than just on the level of a single company?

**David Greely** (22m 09s):

Really fascinated with the idea, is it a collective action problem because I'm a parent, lots of parents out there like probably the memory of parenthood for a lot of people in this generation will be arguments about screen time. And it's very difficult, especially, you know, during the pandemic, it was a way for kids to stay connected with friends when they couldn't see them in person. But how do we, how do we navigate that? How do we solve or, or start to work on that collective action problem? And that, you know, this is the way people connect now. We want our kids to connect with friends. It's different than going to the mall as I did as a young person, but we, we don't want all these negatives that come with it?

**Frances Haugen** (22m 48s):

It's interesting that you talked about malls. So I live in Puerto Rico, and one of the things that I did not expect when I moved here was mall culture is still alive and vibrant here. Like, I think part of it is that we live on an island, and so online shopping doesn't make as much sense because it's, you know, a five day delay or more to get stuff off of Amazon And, you know, when you import things to the island, it's cheaper to do it as like a whole shipping container at a time. So you go to the mall and the mall is just packed with people. But you're right, kids today often aren't even allowed to go to the mall when a mall is still flourishing. You know, more and more malls say if you're under the age of 16, you can't be there without an escort.

**Frances Haugen** (23m 25s):

And so we end up in this situation that's, that's really hard, where individual kids can no longer make choices about how they want to socialize because if a single kid or a family says, Hey, we've realized being on social media isn't good for us, it's not constructive. That doesn't really matter unless the friends of that child make the same decision at the same time. So one of the things that I'm really excited about experimenting with is instead of thinking about interventions at the level of a child or a family, what would it look like if we tried to intervene in a network kind of way you know, you go into a school and you figure out activities for the kids to learn about, know network effects and individual versus collective action about business incentives, about advertising supported business models versus subscription about algorithms and amplification or about segregation acceleration towards more extreme ideas. I think there's a thing where if kids realized what it was they were feeling, they can tell something's wrong. They can tell something unfair is happening to them, but they don't really have the words or the thoughts to articulate what that is. I think more kids would be willing to say, actually, I want to rebuild communities where I control them. I want to be able to socialize in ways that aren't mediated by big centralized corporations or computers.

**David Greely** (24m 39s):

It would be great to give them that agency back and to understand the, the mechanics of the system that they find themselves in, which are opaque and masked behind, you know, non-transparent walls and I wanted to ask you, you know, when you, you kind of brought up earlier the old world, the pre 2007, 2008 world, because it feels like we're now once again moving into a new world. You know, when we talk about some of these issues like conflict addiction, you know, sometimes they're viewed as side effects or collateral damage in the effort to gain our attention, but even if that's true, I do have the sense we're moving into a new era where capturing our attention is being done in harmful ways that are much more targeted you know, mining reams of data about us to be able to pinpoint our vulnerabilities and what we'll respond to using a deep understanding of human psychology and our cognitive biases to exploit them.

**David Greely** (25m 39s):

You know, and now we've got AI that can not only sort through lots of content, but it can also create tailor made content for an individual that no one else may ever see. It might be just for us, even though it's presented as if lots of people are seeing it. So I guess my first question is, do you think I'm being paranoid or accurate and, you know, can you walk us through like if there is a next wave or next generation of strategies and algorithms for capturing and holding our attention, what are those, what's coming at us?

**Frances Haugen** (26m 12s):

So I would say there is a couple different major trends we're seeing, and we can talk about how those trends interact with each other and what the consequences are. So the first is there's an ever growing trend towards shorter form content. So if say the mid two thousands was about the old and age of television, you know, we moved from thinking about 30 minute plots to 30 hour plots, right as Netflix and other streamers began to create these multi-season arc that were rich and integrated. Now we're seeing the rise of things like TikTok reels, YouTube shorts, where the content is less than a minute long. You have to actively engage with it in order to get the next piece. So you can't just have it in the background. You have to really focus your attention on it and I think one of the scariest things about how that's playing out is, I was at a small conference just this last weekend and someone said to me, the thing that scares me the most is I can't get my kids to watch anything but YouTube.

**Frances Haugen** (27m 13s):

You know, anything longer than maybe seven minutes. Anything that's a long form piece of content, they just zone out. You know, their, their kids are about 10 and, and 10 and 14. We should be having conversations about how does the human mind change when you don't have anything that's longer form. The second thing is we are seeing feedback cycles when it comes to community and in-person socialization. I had an interview with a sociologist who was doing some academic research last week. And one of the concepts that we talked about it quite a good deal with length was the idea that that social media is to food. Like fast food is to a rich, you know, farm to market, highly nutritious meal. That there's lots of reasons why people choose fast food. It's convenient, it's low cost, it fills you up, it tastes good.

**Frances Haugen** (28m 03s):

You know, there are lots of side effects of that convenience though. Lots of side effects of how affordable it's, when it comes to socializing. Socializing in person is expensive. You know, it takes time. You have to invest in a, if you have a real friendship with a person, it takes years and years to build that friendship. Lots and lots of adults can talk about how when your life gets busy, often those friendships can fray. When you go online, you get an approximation of a friendship or a friendship or community, and it's much more convenient. Instead of having to wade through long message forms and, and spend lots of time reading and actively navigating to get your next bit of information in a feed, it just comes to you, right? It just constantly stimulates you. It doesn't ask very much of you. We also don't get a ton in return when we combine these different trends.

**Frances Haugen** (28:53):

It means that people end up having less executive function. You know, they have trouble focusing. They might feel more anxious. One of the things that I realized in my own life, maybe two weeks ago, was it used to be when I would have 10 minutes of downtime, 15 minutes of downtime, or maybe I was like eating my lunch and I wanted to just relax. It used to be I would watch YouTube videos, and if you pay attention to how people speak on YouTube, you know, their inflection, the speed, the intonation, it's usually quite intense. It's meant to keep your attention. They want to keep those retention numbers up. They want to get you all the way down the video. But when you watch five minutes of that, 10 minutes of that over and over and over again, you realize it starts to, you just start to feel it.

**Frances Haugen** (29m 36s):

And I did an experiment for maybe the, like I said, the last two weeks, where instead of, of spending those 10 or 15 minute chunks watching YouTube, I now pick a series on Netflix. I've been watching a lot of documentaries, and I watch 10 minutes or 15 minutes of an, of a documentary than I'm watching through the, the, you know, limited run and it's amazing. Like, you actually feel much less stressed by the end of the day and so I think there are these little things where people have to begin realizing that they do have choices and that they, you know, our, our life is measured in minutes in how we spend our minutes. Do we want to spend, you know, if you look at your phone and you add up what you did on your phone in the last week, do you want to spend those hours in, you know, fast food communities or do you want to work on building longer term friendships and it's scary because you have to bet on a limited number of people. You have to work at those things. You might not get a reward for it, but the question is, how do we want to live our lives and what do we want to get back for that time we've spent?

**David Greely** (30m 35s):

Yeah. It's such a fascinating analogy to fast food where no matter how much you eat, you're still hungry because you're not getting the thing, the nutrition that you're, you're, you're seeking out and it's true. I, I know for myself, YouTube's a great example, right. Like, you might kill 30 minutes, 45 minutes watching it, but any video you go to choose, you're like, if it's longer than seven minutes, it's like, ah, I don't have the time for that. So you, while the story never ends, the chapters are getting smaller and smaller and smaller. I wanted to shift gears a little bit and ask you about the role of misinformation, how we deal with that online.

**Frances Haugen** (31m 13s):

Great question,

**David Greely** (31m 14s):

Because one of the things I've been curious about is, you know, it feels like as the algorithms and the strategies become better at getting our attention, there used to be the idea in the old days that free and open discussion will allow the best ideas to win out in the marketplace of ideas and I'm wondering if we're moving into a world where that's kind of naive and potentially dangerous. I mean, we've seen the impotence of fact checking in the face of misinformation over and over, and I'm curious, like, what part of this is not really about information. It's not about engaging with our reasoning or about making a convincing argument. It's about getting around our reasoning and our ability to think critically and grab us by the emotions or our amygdala, you know, like talk intensely talk controversially, that'll get somebody's attention and hold it and that requires a whole other approach. How are we addressing this problem?

**Frances Haugen** (32m 11s):

Well, our, the online communities that people spend the most time in today, things like Facebook, Instagram, you know, they're not designed for unfolding ongoing conversations. You know, they're designed for bite-sized conversations where someone kind of sets the table in the form of a post and then you can have, you know, discourse back and forth to a certain extent in the comments. If you write a really inflammatory post and I spend time writing a thoughtful, well response is almost certain that my response will get lost in the noise. Like, you might go viral, but I will almost certainly not go viral because even if people read it and go, oh yeah, that makes sense, like, I believe that it's not going to get knee jerk reactions and in the eyes of the algorithm, it's not gonna seem like it's as high quality. So we have one of these challenges, which is, you know, you can't really have a free marketplace of ideas if people don't have a chance to respond, or where the tables are, are tilted so much where people who move away from consensus reality get more distribution than people who try to pull us back towards consensus reality.

**Frances Haugen** (33m 15s):

The second issue is, I think a lot of the conversations about how do we move forward, particularly with misinformation, are, are really, really misguided. Because there's, they're still acting in the frame of reference that Facebook introduced years ago, you know, 2015, 2016. The idea that we need to, that the system as a whole is totally fine, as long as we pluck down the bad things. Third party fact checking checks a very, very small number of pieces of content. We're talking at most a thousand or a few thousand pieces of content globally and given there's 3 billion users online, you can see where like those numbers aren't, aren't a, that's not a good equation. But the second issue is, one of the ways that they try to multiply that out have a little bit bigger impact is by having content moderation. Who say, oh, this looks like it's misinformation.

**Frances Haugen** (34m 06s):

This looks like it's violence incitement, this looks like it's hate speech. The problem is, there's a cons, there's a, a field known as adversarial AI. So adversarial AI says, Hey, neural nets aren't actually thinking, you know, the programs that are trying to make these decisions, they're not actually thinking they're weights and measures, you know, their connections inside of a computer and if you slightly change the thing that you're asking the computer to give you an opinion on, you can actually trick that AI into giving you a very different response and so, kind of one of the classic examples is they show you two pictures of a panda. You know, these pictures look identical to a human. You know, if you and I looked at them, we say those are the same picture, but they've gone in and just tweaked a few pixels and so now the AI is certain this is not a panda, this is a monkey.

**Frances Haugen** (34m 56s):

And in a world where adversaries, you know, people who are trying to spread misinformation are going to be able to get very clean data on what is allowed through and what is not because one of the other things that's coming with the Digital Services Act is we're gonna have the right to know when our content is taken down, we're gonna have the right to know when our content is demoted,



they're gonna be able to twist what they create. Think of this as like adding a comma in, you know, little details that changing this word to that word, things where the, the idea is basically the same, but now it gets around the guardians of these of these systems. And so trying to do safety through content, trying to do safety after the fact is gonna work less and less well every single year. And so the thing I keep saying is, we need to pull open the curtains.

**Frances Haugen** (35m 42s):

We need to be able to see the outcomes of the choices these platforms are making and when we do, I think almost certainly they're gonna have to start designing the products in slightly different ways and I will leave you with one last little thing there. Transparency sounds really dry. It sounds really boring. It's like, how, how is this actually gonna change anything. They will say something as simple as kids having trouble logging off at the end of the night. That's an addiction topic we talked about earlier. Right now, a third of high school students say that they're online until midnight or later, most week nights. So 10% are on until 2:00 am imagine a world where every week Facebook had a report. This is how many children were online at 11, at midnight at 1, 2, 3 am you know, it's just like a little data feed. It gets published every Friday.

**Frances Haugen** (36m 26s):

Facebook would begin to figure out ways to give kids real choices on how to modulate their usage. You know, we've known for 20 years that if you make a website an app a little bit slower, people use it less. Imagine a world where a kid can stay up till 2:00 am one night and the next day be kind of hungover in math class. And Instagram pops up and says, Hey, I noticed you were up really late last night. When do you wanna go to bed tonight and the kid would go, my mom wants me to go to bed at 10, but I wanna go to bed at 11 and for two or three hours before that bedtime that that kid picked, when they still had willpower, you know, we all have willpower at noon. We all have willpower at 10:00 am right. For two or three hours before that bedtime, the app could get a little bit slower and a little bit slower and a little bit slower at a rate where you don't even notice the apps getting slower and around your bedtime. You just get tired and want to go to bed. There are lots and lots of design solutions like that, making safer products from the ground up that are real solutions. Like, we don't have to cut kids off at 10 o'clock. You don't have to tell kids what they can't see. We can design these things so that people have autonomy and we respect their dignity, and that's what we want in the future of social media.

**David Greely** (37m 37s):

That's a really, really fascinating approach because it's not about making the person crave it and then saying no, but if you're able to just make it a little bit less engaging, a little bit less engaging until they lose interest, and then it's like, okay, I can let it go. That's really, it's a really cool idea. The other thing you had brought up that sticks in my mind is, you know, the idea of right now it seems like we kind of put the safety on last.

**David Greely** (38m 04s):

You know, and we don't build the safety into the, the structure of the system itself. And I know you've talked a lot about, you know, the fact that a lot of engineers don't have kind of a classical education or a humanities education and like, is that the sort of thinking that we might need to start getting it built into the foundations of the system as opposed to always being an afterthought to kind of consider the second and third effects that, you know, this kind of pursuit of our attention is generating and think more holistically about how to make it a more human experience?

**Frances Haugen** (38m 42s):

So inside most of these big tech companies, there are voices that come from lots of different backgrounds, lots of different fields of study. The problem right now is the people who are given the most space to move forward are the people who are going to increase revenue, who are gonna decrease expenses. One of the things that I think is really important about law is like the Digital Services Act is in a world where the, the externalities of these systems are made visible, where you can't just steal from the societal balance sheet to make your economic balance sheet look better. It gives space to those voices to be treated a little bit more on with more parity, right? They're not just cost centers, they're not just people who are slowing things down. They're people who are preventing consequences or preventing say an advertiser boycott from happening. They're keeping fines from being levied. And so this is really about a system of incentives. We can build complex, diverse teams, but we need to have incentives in place like transparency to make it so that voices that are advocating for a more holistic version of success have a chance to speak and be heard as well.

**David Greely** (39m 50s):

And I'm curious with some of those voices, what is the professional and ethical role of product professionals in developing technology that you know, can influence our thinking, influence our behavior. Is there a code of professional responsibility like you see in other professions or should there be?

**Frances Haugen** (40m 08s):

You know, I'm I was part of the first graduating class at a brand new engineering college which is one of the things I talk about in my memoir, the power of one you know, what was it like to be at a brand new college but I remember, you know, so that's back in the early two thousands, even back then, people were having conversations on should engineers have a code of practice, like a something like the Hippocratic oath for doctors, given that engineers wield huge, you know, not even software engineers, physical engineers in wield such a large impact on society. I think one of the things that we have to start having conversations on is we have a system right now that rewards people who study computer science in not learning about anything but computer science. So, you know, if you're at Stanford and you wanna go work at Google, every class that is not a computer science class that you take will decrease the chance that you'll get hired at Google.

**Frances Haugen** (41m 03s):

I think one of the things that'll be interesting to see is as we live in a world where we start to make visible those societal costs, will it be more attractive for companies to intentionally screen and hire employees that do, that are a little bit more well-rounded. I would guess that over the long term, so this is like over 10 years, over 20 years of your career, taking a broader set of classes even as a computer scientist, gives you more flexibility and more opportunities in your career. The problem is, we don't generally coach young people in ways that they can listen to in terms of saying, yeah, you can just focus on computer science, but you'll commodify yourself if you want to live a rich and vibrant life, if you want to make sure that you're gonna have the biggest impact, not just today, but when you're 40, when you're 50 when you're 60, which sounds impossibly old in a, a world where, you know, many software engineers retire at 35 or 40, right?

**Frances Haugen** (42m 02s):

If you want to be able to fully maximize your impact in life, take a broader set of classes. One of the things that I'm super grateful for and I write about this in the memoir, is I took a class on biogeography when I was in college. So biogeography is the study of the distribution of living things. So it's, you know, like, what, what do the different crickets look like across Hawaii you know, you can actually see how the islands formed because there's more genetic diversity in the older islands than the younger islands, right? Because the crickets migrated over time right. There's like a evolutionary bottleneck kind of thing. If I were to, to look at all the classes that I took in college, that class is unquestionably the most useful class for most of what I spent the last 10 years of my career doing, which is like looking at algorithms and how diverse populations of people can interact with the same algorithm and have different outcomes. Because the thing I learned in that class was about differential forces and how heterogeneous populations can be shaped in different ways when you apply a differential force and that's actually how AI works. You know, you can change your algorithmic system and you can end up shifting your populations. You can end up impacting different populations in different ways and so following your heart and learning about more diverse things is one of these things where it just gives you more different ways to solve problems and I wish more people told young people that.

**David Greely** (43m 27s):

Yeah, and the, the study of natural systems, the study of other social and economic systems, it just, as you said, it brings to light those forces, the way the things can work wonderfully, the ways they can go awry and I think it's a great background for anyone who's gonna be building a system to kind of understand some of the analogs in the natural and social world that have been looked at before and maybe I'd love to kind of finish on this point with you, which is ultimate we would love to get back to that promise of social media, was that we could take away the gatekeepers, take away the vested interests, let people disseminate information freely, foster connection with each other, stay in touch with your high school friends, and, and build trust with people that you don't know yet, and be able to build real relationships, not fake friendships online and I was curious, like asking you as a data scientist, how do we get back to that. Are there innovative technology critical approaches and algorithms that promote accuracy, connection, and trust rather than misinformation, conflict and addiction. I guess I am asking like, do we know how to do this right, but lack the incentives or do we need new tools and new technology?

**Frances Haugen** (44m 56s):

So one of the things I always like to remind people is the Arab Spring was on a version of Facebook that didn't have algorithms. You know, it had a feed, but it was before the algorithmic feed. So we can have a world where we can have large ranging conversations impact, but aren't modulated by million person groups. They're modulated by more human scale thousand 500 person groups working in networks. I think one of the, the, the most promising social networks that I've seen so far is called Post news. So it was founded by a guy named Nom Bardeen, who was one of the founders of Waze. So if you, for those who aren't familiar with Waze, it's like Google Maps. They were able to develop maps for the whole world. Like individuals were able to draw in roads because they had a system of credibility that had many different layers.

**Frances Haugen** (45m 47s):

So if you're a random person, you've never added anything before, and you come and you say that road is misnamed or there, that there's a stop sign there, or that road actually doesn't connect through you come in and edit the map, you know that someone who has more credibility than you is gonna come in and verify that as you interact with more people, as more of your edits are deemed to be high quality, you end up rising up in trust. You might get promoted to be an editor or different tiers of editors and it was a consumer product that was designed around the idea of how do we together collectively converge on the truth and so they're working on a form of social media that is trying to take that same idea of what would happen if instead of having every interaction be just this post, what if it was like in real life where your credibility builds with time, that when people who have credibility think your work is good, that itself builds your credibility.

**Frances Haugen** (46m 40s):

So he's trying to do a social media that's built kind of from principles upwards to be something like a Twitter competitor. But again, this comes back to what I said before. We cannot use innovation to solve a way outta this problem in a world where the way we compare to social media platforms is with marketing messages. So we need to have live in a world where there are, there are obligations for disclosure where we can have academics, we can have, you know, YouTubers be able to say, let's look at the data off of all the social networks this week. Let's compare them, let's make real choices. Because the only way we will get to innovate our way to better systems is if we have the incentives that encourage that innovation.

**David Greely** (47m 16s):

It sounds like we, we need to get the incentives right. We have technology that we can put to work. We've got brilliant people, but you know, like many of the other market systems that we look at, you know, if you don't have the incentive structures in place, the system will go where the system goes and it's not always the best thing for us all as a whole. I want to thank you very much for sharing your time and your expertise with us really fascinating issues. This is this whole idea that, you know, we can build algorithms where what gets promoted is based on what's credible as opposed to what's inflammatory sounds like a really fascinating direction to move into. I wanted to ask you, this is our, our smarter market summer playlist, where we like to think of it as kind of beach reading. Let people kind of think through some big ideas before they head back to the daily grind and in that spirit, I've been asking each of our guests what's on their personal beach reading list this summer and clearly people should be reading your memoir, the Power of One, to get more in depth on many of these issues that we've talked about. But I wanted to ask you, you know, what are you reading this summer?

**Frances Haugen** (48m 20s):

I would add in there it might not seem like beach reading, but I very intentionally wrote a policy book for people who don't like policy books. So it's full of lots of fun stories and lots of entertaining anecdotes so that even if you're like, Frances, I don't wanna read a book about tech policy. I promise it'll be entertaining and it'll we'll bring you along the way. The book I'm reading right now is called The Heat Will Kill You First. It's a book about understanding like what the consequences are of our progressively increasing temperatures around the world. Things like the heat dome that's settled over the southwest or southeast over the last few weeks because it is a, an issue that is gonna become more and more pressing in, in a very short number of years.

**David Greely** (49m 03s):

That's terrific. We'll check that out. Thanks so much for making time to be with us today. Really appreciate it.

**Frances Haugen** (49m 11s):

Have a great day.

**David Greely (49m 11s):**

Thanks again to Frances Haugen, advocate for accountability and transparency in social media and author of *The Power of One*. We hope you enjoyed the episode. This concludes our Summer Playlist 2023. Join us next week as we get back to work with our guest, Robert Friedland, Founder and Executive Co-Chairman of Ivanhoe Mines. We hope you'll join us.

**Announcer (49m 33s):**

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**Announcer (50m 26s):**

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