Facebook launched their platform for developers in 2007.

It's a set of services, tools and products provided by Facebook to third party developers to create their own applications and services that access data in Facebook.

They created their own applications as well: gifts, marketplace, events, videos, and games.

That year 7000 applications had been developed on the Facebook platform. A hundred more were being created every day. By July 2008, the number of applications had grown to 33,000.

One of those applications was a game called Farmville.

It's not particularly innovative. Happy Farm and Farm Town were both released before it on the Facebook platform, yet Farmville became the most popular game on Facebook.

It held that position for 2 years with over 83 million monthly active users. Zynga, the maker of Farmville, is currently worth about \$2 billion. At its height, it was worth about \$5 billion.

Fun fact, Zynga employs behavioral psychologists.

Facebook's ability to make millionaires and billionaires hasn't gone unnoticed.

Since the launch of the app platform, Facebook was criticized for ranking applications by the number of installs.

Does ranking the popularity of applications by the number of the installs sound fair?

How would you design a ranking system?

Consider two applications that are identical.

One is made by Company A, the other by Company B.

Company A is a small company with a few employees. They know that advertising is important, so they spend \$10,000.

Company B has been around a long time, and they decide to spend \$500,000 on an advertising campaign for the app.

Which app do you think gets more installs?

After facing a lot of criticism that their ranking algorithm favored highly viral yet useless applications, Facebook changed the way they measure popularity.

Now, Facebook looks at engagement with an app to measure popularity. The longer the average time spent in an app, the higher the ranking it receives.

Of course, favoring apps that are designed to be addictive isn't the best option either.

And to that point, Zynga employs behavioral psychologists. So once again, a large company can easily game the system by creating addictive products.

Facebook's options will always be limited as long as they favor automation over human curation. That would require hiring people. It's much cheaper and profitable to have software do it.

When a developer makes an application on the Facebook platform, they are able to read and write into Facebook's database.

Developers can register actions which connect to other things found on Facebook. Facebook's most well known action is the like. You've all seen this in your newsfeed: Clay likes Ty's video.

As a developer, I can create actions and see the activity my app creates. But so can Facebook.

Perhaps the most problematic developer tool that Facebook, and to be fair, many other tech companies offer, is single sign on.

Designing a login system is boring.

It's pretty much the same thing over and over. It's also catnip for developers that don't want to be on the hook when their application is hacked.

It's also hard for users. Who wants to create yet another login?

Why not just use your Facebook credentials to login **everywhere**.

But what happens when you decide that you no longer want to have a Facebook account? Yet ... you still need a Facebook account to access applications that use Facebook's system?

Facebook is like a virus on the modern web.

The goal is visibility, so you want a social network to boost the virality of your content.

As a site operator, you can add Facebook's social plugins. Whenever you're reading a blog post or a news article and you see the "share this on Facebook" button, that's a plugin provided by Facebook.

It's really easy to implement with just a few lines of code.

When a site adds the Facebook plugin for sharing, that site doesn't have access to any of the data Facebook is collecting.

But Facebook? They track everything.

By including that snippet of code in a website, Facebook gets to monitor your behavior.

If you think that Facebook only knows what you do on Facebook, you're sadly mistaken.

So many companies use Facebook's development platform. It's estimated that in 2011, the platform added more than 182,000 jobs to the economy with an economic value of \$12 billion.

But we've become complacent with Facebook's power.

It was the first social network to connect over a billion people.

It allows us to share content with others on a global scale.

It has changed how people communicate.

In 2016, 44 percent of the US population was getting their news through Facebook.

It's a prime target for propaganda from foreign adversaries.

Facebook's advertising platform makes it insanely easy to target very specific audiences, compounding problems of the filter bubble.

Facebook has enabled advertisers to direct pitches to almost 2,300 people who expressed interest in the search terms "Jew hater," "how to burn jews," and "history of why jews ruin the world."

This was on display during the 2016 US Presidential Elections.

A Russian company bought more than \$100,000 worth of Facebook ads.

Russia used Facebook Events to organize anti-immigrant rallies on US soil.

We're pretty sure that a 225,000 member anti-immigrant group attempting to organize anti-Clinton rallies was likely operated out of Russia

Russians staged anti-Trump rallies and bought a Black Lives Matter Facebook ad.

The Facebook group "Being Patriotic" was made up of suspected Russian provocateurs explicitly mobilizing Trump supporters.

Russian operatives used Facebook ads to exploit divisions over black political activism and Muslims.

The Russians simultaneously sent contrary messages to different users based on their political and demographic characteristics.

Their goal was simple: sow discord.

Other ads by Russian operatives highlighted support for Democrat <u>Hillary Clinton</u> among Muslim women.

The ads suggest that Russian operatives worked off of lists of racial, religious, political and economic themes.

The Russians created these campaigns with ads, pages and posts with the goal of appealing to one audience and alienating another.

Russians impersonated real American Muslims to stir chaos on Facebook and Instagram.

We know we live in an era of hyperpartisanship.

Facebook knew that Russians were exploiting their platform.

Zuckerberg stated that he regretted dismissing election concerns.

In light of everything we know, that rings hollow to me.

Then there's Cambridge Analytica. That story starts with Global Science Research.

Global Science Research created a Facebook app that let users take a personality quiz.

The app was used by about 270,000 people. Facebook's developer platform allowed Global Science Research to collect data from the friends of people who used their app.

How many people was Global Science Research able to collect information about?

87 million people.

Global Science Research took that data and sold it to Cambridge Analytica.

Cambridge Analytica was then able to take that data and figure out personalities to target through the big five traits: extraversion, agreeableness, openness, conscientiousness, and neuroticism.

With that data in hand, Cambridge Analytica was able to create a variety of ads that targeted very specific audiences with ads supporting Donald Trump.

Politicians obviously will tell you what you want to hear, regardless of their true intentions. Facebook enabled this behavior on a massive scale. None of this should have come as a surprise to Facebook.

Facebook got into politics in the 2008 presidential election when they teamed up with Saint Anselm College to allow users to give live feedback about the Republican and Democratic debates.

In the same year, politicians and interest groups started experimenting with systematic use of social media to spread their messages.

I'm not saying it all bad. Studies have shown that users display signs of virtual empathy towards online friends. And social media can help introverted people learn social skills.

Let's not forget that Facebook was the primary tool for connecting protesters in Tunisia and Egypt during the Arab Spring.

For as much as Facebook has destroyed American democracy, it has helped other countries build more democratic institutions.

But then again, during the Arab Spring Bahrain utilized Facebook to identify, capture and prosecute citizens involved in protests.

The lesson to me is simple: authoritarians like Facebook. And Facebook likes their money.

But it's not just about democracy and civil society.

Social media is tied to feelings of envy, looking at holiday and vacation photos. Leading people to be dissatisfied with their life.

Studies have also found that the longer you use Facebook, the worse you feel about yourself.

And Teenagers exhibit more narcissistic tendencies.

And young adults show signs of antisocial behavior, mania and aggressiveness.

I wonder how many of the people that showed up to the Capitol Building to overturn the results of the US Presidential election were nurtured by Facebook.

But here's something to think about.

While passively consuming the Facebook news feed left users with negative feelings, interacting with messages pointed to improvements in well-being.

What if a social network designed a newsfeed that encouraged a broad range of interactions?

With people that weren't in your bubble?

And what if the focus was less on engagement and more on civil discourse?

And what if Facebook aggressively moderated their platform for misinformation, hate speech and calls for violence?

In the midst of all this manipulation, we should also talk about the culture of self disclosure.

The uptake of Facebook and other social media has made us question how we should present ourselves online.

It's a massive self-branding exercise.

We have trouble knowing who we truly are.

Many people have developed two faces: a private one that represents how they really feel, and a public face for use in the outside world.

If it's true that the online and offline worlds are blending, does that mean we can't pretend to be someone else on the internet?

Mark Zuckerberg doesn't think so. He has said "Having two identities for yourself is an example of lack of integrity."

Facebook wants you to feel amongst friends in a safe, controlled environment. No punks, no criminalized migrant street culture. Well, ok, maybe some fake Russian accounts here and there to make you feel like the world is conspiring against you. Maybe a few groups for white supremacists to talk about violently overthrowing the results of a democratic election. And just so disinformation can spread, let's reduce the amount of relevance to authoritative media.

But then celebrate, as long as you have one identity.