**Demystifying Web 3 - A.I. and Blockchain
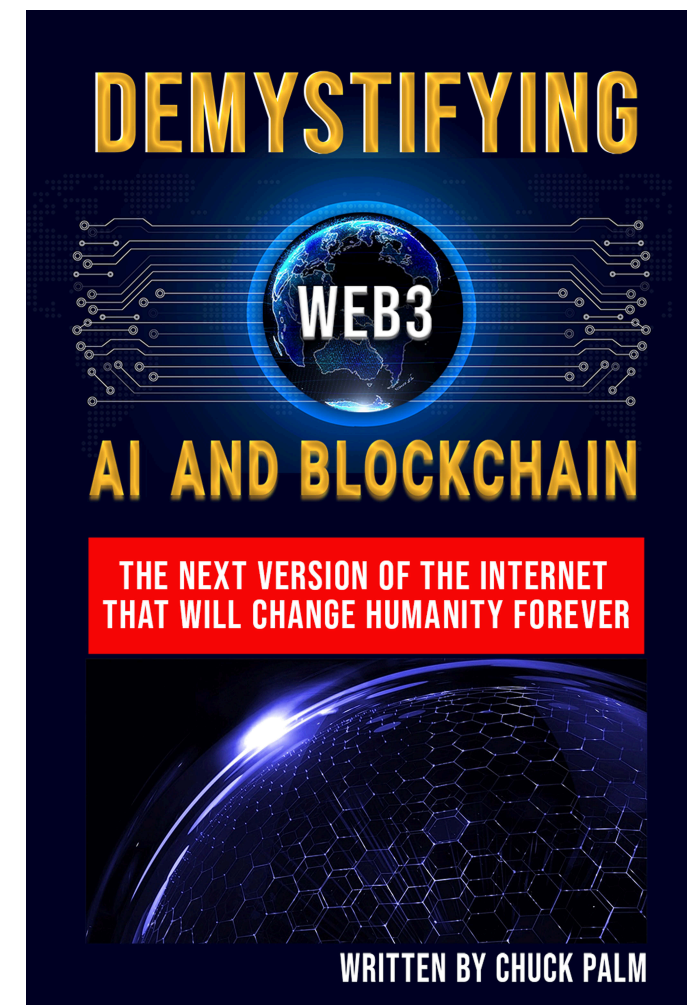The next version of the Internet, that will
change humanity forever.**

DEMYSTIFYING

WEB3

AI AND BLOCKCHAIN

THE NEXT VERSION OF THE INTERNET
THAT WILL CHANGE HUMANITY FOREVER

WRITTEN BY CHUCK PALM

Artificial Intelligence and
Blockchain Are Changing the
Internet, But Is It for the Better?

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Forward

Let me start this off by saying that this book is an entry-level, 30,000 foot overview, and not written for the techno-nerds, of who's ranks I consider myself amongst. It is a forwards to backwards look at A.I. and what is now dubbed "Web3" from the viewpoint of a historian, and tech futurist, who's only trying to help the average citizen of our multifaceted technopolis get a grasp on some of the most misunderstood and misrepresented technology of mankind's short existence on this plane of existence. Fair warning, I'm a technophile with an optimistic view of man's future development aided by technological advancements. If that did not scare you away, venture on, dear reader.

This entire 3 book series was started a few years ago, when I noticed some major paradigm shifts in the way we consume content online.
The Great Social Media Revival was already in full swing, and the major tech trends moving

toward A.I. and things like Cryptocurrency, NFTs, and Blockchain applications really started to flourish in early 2022. By mid-2024, the paradigm shifting was happening so fast, I thought we were going to burn up the clutch!

I believe that much of what the tech industry in the media does is to try to use jargon and purposely complicate the language, in an effort to make themselves look more important, and to keep the average person in the dark, thereby making themselves feel more important, and employable!

 I have taken on the mission of simplifying all the breakthroughs, explaining the complicated concepts, and demystifying the jargon, so that someone like my aunt Hariet can understand it. Believe me, that is no easy feat!

When I began writing this, it occurred to me that just like Cryptocurrency, A.I. would raise more questions than it answered. To the

outsider, It seemed like a solution without a problem.

For that reason, I've attempted to write about A.I. from the perspective of the causal web surfer, someone who may have heard all of the wonderful and scary, the amazing and paranoid, as well as the fantastic and terrifying from…well, everyone, regardless of their own understanding of it, and still does not know what to think about it. Trust me, you're not alone.

The best of the best in tech, the various media outlets, including social media, and every government worldwide, are all trying to weigh in, and make sense of something they truly don't understand. Worse than that, some of them are trying to regulate and control it, without one inkling of what it really is, how it behaves, who holds the reins, and what it is likely to become. This, my friends, is my mission.

I know just enough about enough of it, to bring you some sanity, in the guise of this book. It is written for you, with you in mind, in language you will likely understand, without a bunch of acronyms or jargon, designed to confuse those of you that don't have a computer science degree. It's also intentionally short, about 2 ½ hours to read or so, the average length of a plane ride.

If you trust the news, then I'm afraid I have some *bad* news. Most of the news outlets in the world (there are currently only about 4), have no clue what they're talking about, and just regurgitate whatever they get from their parent news outlets.

I'm living proof, as I've attempted to make sense of the A.I. perspective from those news outlets, and condense it down into consumable bites every weekday on a national radio news program. I'm telling you, they've got it wrong,

or worse, they are feeding you what they have already been fed. YUCK!

 I had every intent of publishing this book in November of 2023, but several things were converging at the same time . Not the least of which was the purchase of Twitter (now X) by Elon Musk, the rapid-fire advancements of Generative A.I., like Chat GPT, Google, Grok, Apple A.I., Meta, and dozens of others, as well as the various Cryptocurrency corruption scandals, and their trials, and all that was in the news that followed.

The Sam Bankman-Fried conviction made the top of the news in March of 2024, with his trial for fraud and corruption, losing billions of his investors and clients money, in what seemed like he just left it in a drawer somewhere. I'm not sure if he is an evil genius, malcontent, or just concocted a scheme to steal all of their money.

For all appearances, the entire operation at FTX just seemed to be inept. If his intention was

theft, you think he would have spent some of it on a better wardrobe, or at least a decent haircut!

For all these reasons, I made the decision to delay the release of this book. In hindsight, it had a little to do with 2024 being a disaster of a year for me personally, multiple family health crises, and losing our family dog (that one still stings), it was all because of *ALL of those* reasons.

I admit that I'm easily distracted, but A.I. has been developing and growing so much faster than I think even the "so-called experts" suspected it would. That being said, it's still a pretty dumb technology. *Somewhat useful, but still mostly dumb.*

I say that AI is still pretty dumb, because the more I use it, the more I feel like it's still acting more like a precocious child, somewhat confident, and pretty sure of itself, but still says "pasgetti" instead of spaghetti once in a while. I can't wait to see what it's going to be like as a teenager!

Introduction

The A. I. and Web 3.0 Connection

For some reason, the "powers that be" have decided that this particular iteration of the Internet is to be dubbed "Web3". The first Internet, "Web 1.0", and the second, Web 2.0, seemed to make sense, for those who like to label things. As the Internet has matured, it seems those in charge of naming things did not. Web3 is not "Web 3.0", which would make sense, as far as nomenclature goes, but noooo,

we have to talk like hipsters, and abbreviate that which is already abbreviated.

Web 1 was simple, someone published something, you gained access to the Internet, navigate to the webpage, and view the content. Simple, right?
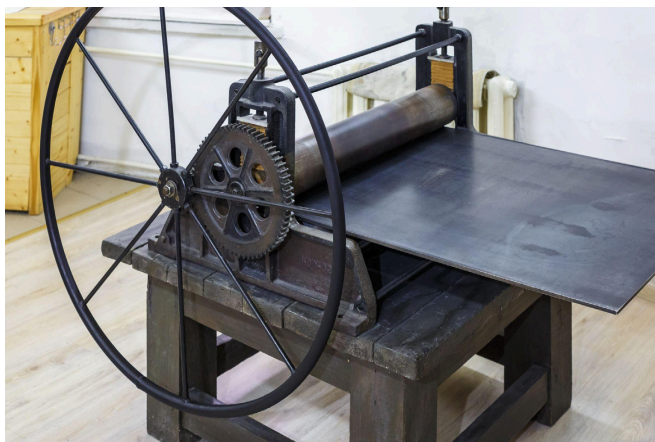
Tech innovation #1 - The Printing Press

Web 2.0 was not much better, but, by definition, it gave everyone the ability to create their own

websites, and publish content. A major step in the right direction, for sure, but still pretty much the wild, wild, west, technologically speaking. There were few rules, restrictions, standards, or even guidelines as to how to conduct yourself, which made this all the more interesting.

Now, almost 20 years later, **Web 3** promises a "new frontier", a more democratized Internet, with guidelines, standards, and tons of opportunity to earn profit, publish, and get this…PROVE your ownership of your digital content! Pretty heady times we're living in.

Web 3 is the promise of ownership. Much like the "Old West", the latest version of the Internet promises "40 virtual Acres and a Digital Mule". If you are on the forefront of Blockchain, Digital Currency, the Metaverse, or A.I., you are the new trailblazer in the Digital Frontier. Saddle up, I'll meet you for a can of beans at the Chuckwagon.

Dedication

This is the third book in the "Demystifying Web 3.0" series I started writing in 2022, to try to explain to my family why I was so excited about Blockchain, A.I., Cryptocurrency, and NFTs. The jury is still out on how many of them "get it", but the feedback has been mostly positive.

I'd like to dedicate this series to a few people who have been with me on this wacky journey from the beginning. At the risk of repeating myself, my immediate family, my lovely wife, Kerstin Palm, son Lucas, daughter Lena, my brothers, my nieces and nephews, especially Bradly Pugh, my parents, Chuck Sr. and Betty Palm, Judy and Greg Mazur.

To my longtime friends; Mike Spiessbach, Matt and Lisa Storey, and my oldest friends Troy and

Charyl Workman, Dirk Naber in Germany, (The Germinator!), all my cigar buddies, stateside and in Germany, especially Cigarwolrd in Dusseldorf, the staff from Edwards, and Grand Cathedral Cigars in Tampa, for giving me sanctuary from the literal storm.
Special thanks to "the boys" from Blue Lotus, and the vast variety of social media followers on multiple platforms.

To John Trout and the gang at Westwood One, for giving me a national radio platform, and a shot to get back into broadcasting, thanks for your mentorship and encouragement.

Finally, to my in-laws, Klaus and Ulla Schwahn, who gave me the space in their attic to create a tiny studio in Germany, where I spent a lot of the time that I needed to finish this book.

Schwahn Studio 1, near Dusseldorf, Germany

Your collective encouragement and support continue to keep me passionate about technology, and my mission to "demystify" as much of it as I can. If you are on this list, and did not get your free copies of these books, email me, I owe you.

PART ONE
Web 3 and Blockchain

Chapter 1 - Artificial Intelligence: Is It Evil? Is It Even Useful?

There is a lot of buzz about A.I., and it ranges from "It's world-changing technology" to "It is world *ENDING* technology". I believe that like most inventions, it really depends on how you use it.

Are you like Dr. Evil, trying to extort "KAZILLIONS" of dollars from the U.N., or are you more like the next incarnation of Mother Teresa, attempting to save the orphans by using advanced search chatbots and sophisticated "prompts" to find better ways to raise money for blankets for the orphans?

Both extremes are feasible, but let's face it, most people just want to get things done faster, and create stuff with as little effort as possible. Humans are drawn to the path of least resistance, we want it fast, cheap, and easy.

Like most new tech, it has a lot of bugs to work out, and it's likely most people will give up

before they learn how to best make use of this amazing advancement.

What is A.I. Doing, Really?

The secondary issue is how reliable is it? Early versions of the "publically available" chatbots are still pretty stupid. They are training these models on data that lives online, and let's face it, a lot of the stuff on the online today is pretty dumb. Little of the content is verified, and much of it is slanted, in one way or another (biased), or flat out wrong, so how much of it do you really trust? Would you give your kids unlimited access to all the World Wide Webs' web pages, and then tell them "here ya go, learn everything you can" without any real guidance?

Much of what today's A.I.s are reporting back is just that, inside an echo chamber, with the intelligence, emotional, and educational sophistication of a grade schooler with a remote controlled drone, flying it around indoors without safety bumpers installed!

Now, let me tell you why I still think *A.I. is* ***still a good thing.***

A.I. is learning about everything from everything we publish. That means the good, bad, ugly, dumb, the biased, and the based, all that we in the human collective have posted online. For the moment, that is pretty important, and vital to its learning.

It used to be speculation that A.I. could only grow its intelligence and maturity by learning the same way that humans do, through age and experience. You'd be pretty naive to think that your kids aren't learning from what they read on the web, even with supervision.

The Future of Knowledge

There is a very disturbing trend in the global population. Birth rates, all over the world, are plummeting. Not one major world economic power is replacing its aging population, as new parents are having fewer than 2 children.

A study published in The Lancet predicts that by 2100, almost all countries, worldwide, will have fertility rates below parent replacement levels. In the U.S., the birth rate has been declining for over 15 years, with data from the CDC showing

a 2% decline from 2022, recording 3,591,328 births.

To me, this is more terrifying than A.I.. This most certainly will lead to a decline in the preservation of the human knowledge base, with fewer people taking interest in preserving that information. As replacement technology is more automated, it will be decided by machine, mostly because people are lazy, they will be using artificial and automated means to select what information is deemed important enough for preservation, and that will be done by fewer and fewer people.

Why is this scary? The old adage applies here, "History is written by the victors". In a massive example of true irony, even trying to find attribution for this phrase, is wrought with misinformation and mis-attribution. Most think it was Churchill, others say it may have been Hitler, or Alexander the Great.

The best result A.I. could give me is that no one really knows for sure. See what I mean? History lost.

To paraphrase the great Winston Churchill
"The only thing we have to fear is Artificial Intelligence!"

The Future of Tech: A.I. & Web3 Everywhere

Does it bother you that we are teaching and expecting A.I. to be ubiquitous? It's estimated that by 2030 (only 5 years from the 1st edition of this book) A.I. and automation will have replaced 60% or more of the mundane, customer service and other non-skilled positions in small and medium-sized businesses. The number is even larger for big businesses.

The Law and A.I.

Lawmakers in every major nation on the planet are considering legislation that will protect our kids from our digital selves, by the way of what we publish on social media, news and information sites, literature, entertainment, and yes, even porn. States like Texas and Florida are considering legislation that will force content providers to verify age and identity of people who visit adult sites, in order to protect our youth. Many other states are enacting, or have enacted new laws that limit the access to social media sites like Facebook and Snapchat for kids under 16, and even outright ban certain sites for minors, like porn, in the name of child safety.

I believe It is still imperative that we teach our young right from wrong, not only to give them a moral compass, but to better the world, by bettering our replacements we intend to leave behind as our legacy.

Honestly, there is a lot that is wrong on the web, and for the most part, it is publicly accessible, by anyone. Should states have the right to restrict access to anything published, blatantly firing in the face of the First Amendment of the U.S. Constitution? The debate rages on.

Chapter 2 - How Web 3.0 Is Changing the World

Web 3 is not a new version of the internet. It will be an addendum, a new amendment if you will, or at the very least, a new layer on top of the existing internet network structure. "The Blockchain" is a system that is designed to organize that data better, and identify, with certainty, ownership of certain digital properties, often referred to as NFTs. (no, not the weird monkey art, but useful, utilitarian serializing programs)

NFT EXAMPLE

(NOT AN ACTUAL NFT)

The simplest way to think about it is, when I create any DIGITAL record, whether it's a database entry, or an email, or even a web page or blog post, that data is stored electronically in one location forever, under its URL (or its web address), and assigned a unique serial number that can never be changed. If you lose your incredibly long and complicated recovery passphrase (usually 12 words, in a unique

order), you'll lose access to that property, probably forever.

The internet is already well designed to handle that information, so why do we need a Blockchain?

What the old Internet does *NOT* do very well is protect that data, or allow you to claim ownership and say "this content is mine, forever more"!

You can't really see the blockchain, but you should be told that you're not allowed to copy or steal any data that does not belong to you, and have some way for you to prove that ownership. Much the same way a title company stores records of your property, like your mortgage, or the DMV keeps records of vehicle ownership.

For things like e-commerce, this adds an extra layer of security and the ability to verify identity without obscure passwords, or texting a secondary code to your phone, or other disruptive versions of authenticating who you are, even though you still need a passphrase initially to prove your ownership.

Prove You Are not a Robot

There have even been new applications and hardware designed for the end user to be identified, and have their information stored on the blockchain, so they can access it via their retina, or their face, or even their palm print, via their unique vein pattern, since fingerprints aren't really that unique.

Sometimes, they work in conjunction with additional devices, like USB drives, or two-factor authentication protocols, adding to your frustration, but that will be replaced soon enough. See Ch. 8 of "Demystifying Cryptocurrency" for more on my opinion of password authentication methods.

Effects of Blockchain networks and A.I.

E-commerce also ties into cryptocurrency and banking information that can then be tied to accounts that would pay for access to other

people's information, subscription services, maybe even streaming entertainment, like cable TV services that are now online, and subsequently raising their rates, after they hooked you into streaming all your favorite shows at a cheaper price.

New Video Delivery platforms, which are *ALL* of the online streaming services, that currently require 10 different forms of ID, and your grandmother's maiden name, just to be able to access your favorite TV shows, are now going to **Web 3**. They are already preparing to allow you to access entertainment that you have subscribed to, or even paid for previously. How do they know you bought the digital version of "The Avengers" previously? Blockchain entries in a database, that are tagged onto your login id.

The other belief I have about the innate goodness of people to manage their own content, and what A.I. will do with it, is this simple rule:

People want answers that are simple, fast, and accurate. Fail to provide that, your A.I. will not be popular for long.

 If you use A.I., and don't get the expected result, your A.I. application will likely wither and die. If you ask your chatbot to "go get the nuclear launch codes from Russia", and it says "I'm sorry Dave, I'm afraid I can't do that", then you'll eventually give up. People are lazy, and those that are really persistent, will soon realize how futile such efforts are.

If your A.I. comes back and says "Sure thing Dave, the nuclear launch codes you requested are…01234-BR549", and you're brave enough

to try it, then find out they weren't the right codes, then you get the same result.

Another example would be the Amazon Digital Rights Management policy that says at any time they can retrieve your license and basically take away the information that you "paid for" to be able to view your favorite Marvel movie online. For example, the wording on their terms of service states -

"Purchased Digital Content will generally continue to be available to you for download or streaming from the Service, as applicable, but may become unavailable due to potential content provider licensing restrictions or for other reasons"

[1]So the Amazon agreement changed in favor of Licensing for the content creators (in this case, in favor of Disney / Marvel Studios).

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[1] Amazon Digital Rights for Purchased Video Content https://www.primevideo.com/help?nodeId=202095490&view-type=content-only#

PARENTAL ADVISORY - How EXPLICIT LABELING Changed Everything

Let's take the record industry example for a moment. The record industry came up with a labeling system, officially known as the Parental Advisory Labeling System (PALS), that was designed to appease advocacy groups and parents who sought to protect children from potentially harmful or inappropriate lyrics in the ever-increasingly foul and harsh language put on rap and hip hop albums in the late 80's and 90's. It was meant to educate parents, and protect kids, but, ironically, it did not decrease sales for this kind of music, but rather enticed young people to buy this titillating music to a much greater degree, and every artist wanted a *Parental Advisory* label. Wow, who would have seen that coming? A.I., would have, for one.

Unless you've been asleep for 40 years, you've seen the impact that music has had on the media and our culture. I've seen the strict standards that the FCC had for broadcast TV and Radio slip into almost non-existence, with the lyrics degrading women, the over the top foul language, and the ridiculous "blanking" or dubbing of offensive words by censors, as if that somehow purifies it. If anything, it also brings greater attention to it, like the labeling did!

I'm no purist or prude, but I dare you to call my daughter or wife any of those names in front of me! I am only using this example to point out how "labeling" something will only give it more power, and like art, things that are deemed "offensive" or inappropriate will highlight the desire to have something that is forbidden! It's human nature, ask anyone who smoked before they banned it inside every restaurant.

So why do I think that it's good that A.I. is discovering all of this on its own, stumbling over all this inane, unintelligent, and sometimes even dangerous content? Because, I believe in the innate goodness of *people*. Not the *person* per-se, but people collectively. Unless they're a politician or a lawyer, or both.

I believe that people, when faced with a moral dilemma, will do the right thing, given every opportunity. The individual will stand by and try to capture it on the phone and post it to the web to increase their views, thus proving my point.

Ghosts in the Machine

There really is a phenomenon known as "A.I. Hallucinations" that actually *DOES* give you made-up information in a response to a prompt that it does not understand, or one that you've designed to fake it out, you will be fully amazed at the levels of stupidity that this iteration of A.I. has been spewing. To quote *Forrest Gump*, "stupid is as stupid does".

How is this a good thing? Because people will demand better, and the market (or the geeks themselves) will respond with better results. Especially after such high expectations, and being let down in such spectacular fashion.

A.I. is improving every day, and at light speeds. Each iteration gets more features, and capabilities, but NOT smarter. I delayed this book by several months, because the changes were coming in so rapidly, when I finished a chapter, it was already outdated or obsolete.

We see updates that are making A.I. more accurate, more user friendly, and eminently more useful. Not just for corporate America, but for the average joe as well. If you're paying a monthly fee for a product that spews out nonsense, there are plenty of examples of that already online for free (see ANY social media platform), so save your money. The rush to develop better hardware and computers that can do more for you with less interaction is exactly what I was referring to when I said "people are lazy, and want things simple, cheap, and easy".

Consumer demand + human nature + market forces = better products. It's pretty simple math.

All Content is not Created Equal

As someone who has been creating a lot of content for a very long time now, this is concerning to me, because theft of content is as old as the first musicians that recorded sounds on wax records, people found ways to steal and re-record it. I personally have been a victim of

stolen content that was repurposed, and used to attract customers to a commercial website from a podcast that I created in 2005!

In this particular case, I don't really feel like imitation was a sincere form of flattery.

How Does Web 3 Affect Currency?

Blockchain is the underlying network protocol that Cryptocurrency uses, and by design, it is one of the most secure public networks that everyday users can use. Creating cryptic content is in its very nature. You must participate in the policies of policing the network to be able to store data on a blockchain.

With that in mind, it makes sense that Cryptocurrency and NFTs use this more secure version of data storage and retrieval, but that it is also profitable to do so.

Application designers who created software that has a secure utility, encryption, enhanced tokenization and serialization of data, like cryptocurrencies, are naturally going to prefer to write their applications to be compatible with a blockchain network, and by design, will have this ability baked right in.

A.I. needs permission to use most public networks, or must be "sandboxed" in a safer, virtual version of the Internet, with some guardrails built in for safety.

Blockchain networks can protect Copyright data, like stuff behind firewalls, cryptos, or other repositories that the A.I. would not have access to, such as book libraries, personal, or sensitive data, can then be blocked from prying GPT eyes.

Also by design, A.I. systems are curious, and want to explore. So again, using a blockchain network without permission is nearly

impossible, and it makes sense that if we want better A.I. searches, and more realistic responses, we would work with blockchain software developers to give access to certain bits of information that are stored on a blockchain, to help both A.I. and blockchain developers create better, faster, and smarter software, with more intelligent, organized responses.

This is the blending of the best of both A.I. and Blockchain networks.

The Old vs. the New: Digital Rights Management

Even original music, written on papyrus, has been stolen and released without the permission of the writer. It was very easy for somebody else to write that same music down and steal that song. So we created a legal system that manages information, called "copywriting" and "Intellectual Property". This system is as old as papyrus scrolls, and just about as useful in a digital age. Enter Digital Rights and Digital Intellectual Property.

Chapter 3 - Web 2.0, That Was Then

There was a time, in Web 2.0 (roughly 15 years ago) when DVD's and music were mostly available only on optical media discs, called CDs and DVDs.

Today, it's hard to even find a DVD player. In the age of Digital Rights Management, the protection was baked into the media, and was frankly easy to circumvent. We only had to "rip" a CD into MP3's, copy to a hard drive to get around it, then, and only then, could we post that music online to a sharing service, like Napster. Soon, we would do the same with videos, and in my opinion, that was the very push that the Internet Service Providers (ISP's) needed to increase our available bandwidth,

and provide users a bigger "pipe" for us to download more digital content, and increase streaming speeds.

 User demand for faster downloads was because they wanted music, video, and other digital content delivered on demand, and again, we wanted it fast, simple, and wherever and whenever we wanted it!

Portable players meant still carrying the media around with you, like iPods Zunes, and Portable DVD players, but that just was not good enough anymore. Videos became all the rage for downloading and viewing on the go, and the devices to play them became less expensive and readily available.

Did the music and video industries fail the consumer, or did we just get more sophisticated

in how we wanted our entertainment delivered? The short answer is both.

Frankly, the artists who created all these wonderful songs, movies, and TV shows suffered the most! Writers actually went on strike in 2007, because they were never given *any* royalties on DVD sales, as few of them could see that far into the future to have it written those royalty payments into their contracts, so naturally, the entertainment industry took advantage of them for as long as they could.

Protecting Content Creators

So, how do we fix the problem where content creators (artists) and producers and managers can get paid fairly, and equitably, without going to court every time someone "pirates" their artwork? The blockchain may have the answer.

Blockchain Ownership - a Quick Review

It's not easy to explain the Blockchain to someone who is not tech-minded. If you understand networking, the idea of connecting computers, tablets, and phones together on a public wire, then you can grasp the idea that the blockchain is like having an additional lane on the information Superhighway.

 This new "express lane" requires you to conform to the new way of storing and retrieving data, much the same way an express lane on the highway may have an extra toll charge, or require more than one occupant in the vehicle, like a carpool lane. The analogy falls apart after this.

The blockchain actually runs on the existing network protocols, and does not require much additional effort on your part to navigate. It does, however, provide you access to data and

services that the regular Internet does not, if you are using the right tools.

Those who choose to verify the transactions on the network are called miners, and are rewarded in tokens for their efforts, in the form of cryptocurrencies on that blockchain, like Ethereum or Bitcoin, for example.

The software required to access blockchain data can be installed, or used through a portal website, like OpenSea.io, where many artists

post their digital artwork, known as NFT's. (See Demystifying NFTs in this book series).

You will need a ticket to gain access to this content, known as a Digital Wallet, that verifies your credentials, and gives you access to Cryptocurrency, the coin of the blockchain realm.

Much like the standard Internet, the Blockchain is not owned by anyone, but maintained by all. Blockchain technology is more of a platform than a network, and it is designed to track specific data, or serial numbers, and allow you to access the serial numbers with your credentials, and prove ownership of the data stored within.

Everything from NFTs, to Cryptocurrency (See Demystifying Cryptocurrency in this book series), to music, art, and virtual real estate, including real world, and other tokenized assets, the blockchain is the only city bus to get you to

your destination, to *digital ownership of content* and other metaverse doodads.

Why is the Blockchain Important to Ownership of Digital Assets?

If you go through your entire life without ever buying any Cryptocurrency, or NFTs, you would eventually become the *king of the Luddites*[2]. Simply put, you probably already own some sort of digital asset, and one of many versions of Blockchain network is where it lives.

Not because you own an NFT artwork, or bought some Bitcoin, but because **PROVING you own *ANYTHING*** will soon be represented digitally, online, securely, and verifiably, to anyone who wants to know.

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[2] Luddites were English workers in the early 19th century who protested against industrialization and machinery that threatened their jobs. They are known for destroying weaving machines. Today, "Luddite" describes those opposed to technological change due to its societal impact.

Soon, all your assets will be digitized, with proof of ownership

Soon, your mortgage, birth certificates, passports, a title to an automobile, a certificate of authenticity for a physical (real world) object or rare collectible, even the very money you use, will all be digitized, and thereby **TOKENIZED.**

Banks and other financial institutions are already tokenizing their documents, deeds, titles, ownership papers, wills, and other important data that needs to be accessible, and storing them as NFTs on a blockchain. Those assets are now tokenized, serialized, and

verifiable in an instant, and can be transmitted at light-speeds, anywhere on the planet you have access to the internet.

Web 3 Around the World

Countries are already adopting online virtual currencies, (various different flavors of cryptocurrencies), and implementing trade and conduct rules for cryptos. Even France is accepting Ethereum and Bitcoin purchases at McDonalds! Get your head out of the sand now, because everything you claim as yours will have to have providence, and your proof of ownership will be digitized, tokenized, and stored on…you guessed it, a blockchain.

I recently visited Germany in late 2024, and the EU is instituting policies and procedures for European Union Central Banks to handle cryptocurrencies as well as A.I. conduct.

As of late 2024, the EU has already adopted a comprehensive framework for crypto-assets, including utility tokens, asset-referenced tokens (ARTs), and electronic money tokens (EMTs).

This is called MiCA, or Markets in Crypto-Assets Regulation, and is a comprehensive set of laws that claim to:

- Provide legal certainty for crypto-assets
- Protect consumers and investors
- Ensure financial stability
- Promote innovation
- Exclude non-fungible tokens (NFTs) and financial instruments from its scope

Basically, the EU is setting up a level playing field for crypto assets, and embracing the blockchain as a foregone conclusion, but only picking and choosing what they deem to be valuable.

These regulations include rules for decentralization, applications, and money transfers, as well as anti-money laundering protocols.

A word about NFTs

NFTs are often thought of as collectible digital art, something you can trade like baseball cards or comic books. This is not wrong, but it is far from accurate. The structure of an NFT is a digital marker that stores a serial number, and when properly "minted", it becomes something so much greater.

The NFT is the building block of the blockchain, the digitized "token" that represents an asset, or collection of assets, and stores that ownership, creation date, and data stored within it, much like a bank safety deposit box. Without NFTs, there is no blockchain.

Virtually all data currently existing on a blockchain, began its life as a lowly NFT. It only became valuable when someone decided to assign a value to it, and trade it for cash, assets, or other digital tokens, in the form of cryptocurrency. That does not mean that is the only value for an NFT, since it is the ledger in which ALL blockchain assets are stored, it's imperative to think of them as immutable repositories or databases of serialized information, and could represent something insignificant, or of immense value!

NFTs are so important in fact, that without them, we'd lose track of all crypto, artwork, digital rights, ownership, and access to virtual real estate, and REAL real estate stored online. The database that manages access to the minted NFTs is so valuable, that it is constantly verified by independent agents, and those agents are rewarded with cryptocurrency for making sure the ledger is valid.

This reward, in the form of a cryptocurrency, is how new cryptocurrencies are born, by "mining" the data, they earn the coin.

The NiFTy thing about it is, the organizations and institutions that are the trailblazers for this new way of doing business, are finding even BETTER ways to utilize it! The revolution of tokenization has created new jobs, better

customer service, made lives easier, and even created millionaires, in the shortest time in business history! Even the A.I. revolution has not had as great an impact (yet)! Be nice to these geeks, they hold the keys to the digital kingdom!

Chapter 4 - How Will the Blockchain Impact my Business?

I mentioned that banks, lending institutions, financial advisors, and traders are already heavily invested in blockchain and cryptocurrencies, but they are not alone.

There are plenty of companies already staking their claims to the digital kingdom, and soon, you will be too. In fact, it's likely your company is using some blockchain tech already. Many accounting programs, day traders, mortgage and social media companies, even A.I. firms are tracking and storing information on the blockchain.

The supply chain is migrating much of its reliance on verifiable location and origination information, and depending on new systems to show in real-time where assets are, when they are due to arrive, and how to order them faster,

so they show up when and where they are needed. The only way to store all of that disparate information is to keep track of it on a blockchain.

A Word on Cryptocurrency

Digital Banking and Cryptocurrency are not the same thing. We use digital banking every day, and in fact, we do not have enough trees in the world to print even 1/1000th of the currency in use in the United States, let alone the rest of the world's economies. That being said, digital transfers of funds and the acknowledgement of

the same have been happening for decades, and without human intervention.

Bank fees for transfers, bounced checks, foreign currency exchanges and other extra services not covered, used to be justified because the banks had to spend extra "man hours" to facilitate the reconciliation of funds, and keep the books balanced.

If computers are handling all transactions and reconciliations, then why are you still getting these extra charges for allowing a multi-billion dollar company the privilege of managing and investing all your money? After all, because they hold all the cash, they get to invest it, and earn big dollars, and give you a pittance, to make you think it's fair.

This is one major factor why cryptocurrencies are going to supplant banks, so whoever runs the new "digital dollars" will get to gouge you.

Let's talk about how transactions happen today, compared to how they happen on a blockchain currency, like Bitcoin.

You pay for goods or services with your debit card, and the vendor runs your card, usually through a card processor (for a fee), who then uses the electronic information stored on the card to contact your bank, request the transfer of funds, and credits the vendor's account, usually taking 10-30 seconds, using the traditional Internet connections.

Many times, the transactions are just compared with flagged accounts that are no longer valid, to shorten the time to get the authorization. Not necessarily processing the transfer, but "pre-authorizing" it, and to put it in a queue to reconcile later.

  There is a lot of trust put on our credit card processing companies, after all, they have impressive names like "Visa", "Master Card", and are owned by even more impressive Banks, like "Bank of America" and "Chase Manhattan".

We allow them to charge us fees for the privilege of having access to our money, and to use their outmoded plastic cards that are easily spoofed, creating a billion dollar fraud prevention industry, that is also funded by our money, and then, if you're a good little consumer, you get to earn 1.5% interest on *YOUR* money.

How did we let it get out of hand? Is money management that difficult that we chose to let them rip us off to make our lives a tiny bit less complicated?

What About Fraud?

Banks have been being robbed since the day of the first banks. Digital banks are no different, and not much harder. When you ask a bank robber, "Why did you rob the bank?" The best answer is, "that's where they keep all the money!"

So, why is everyone so up in arms that digital currency is being used for illicit purchases, fraudulent scams, online pilfering, etc?

Hackers are no different than bank robbers of old. If you learn certain skills, and have questionable morals, it's likely you'll find a lazy way to steal.
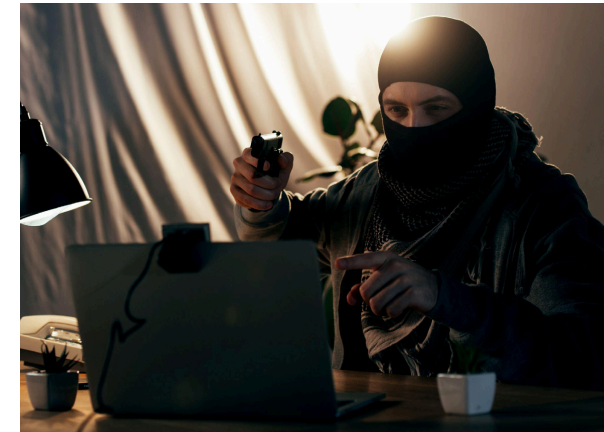
In 2023, consumers lost more than $10 billion due to fraud in 2023, a 14% increase from the year before. That is just wire-transfer fraud. Overall, the fiat currency scandals are much higher, and easier to pull off than cryptocurrency fraud. That being said, anytime YOU lose money, it's much more impactful. If you've been taken in by a scammer, it really doesn't matter if it is crypto or hard currency, you lost money, and you're mad about it.

What I fail to understand is never moving out of your typical investments, because you've been told that crypto isn't real, it's too risky, and it's all just a ponzi scheme.

Investopedia.com defines A Ponzi scheme as an investment scam that pays early investors with money taken from later investors to create an illusion of big profits.

Stock investments promise high returns, if you buy low, and sell your stocks for more than you paid for them. If you look at the hard numbers, based on the return of Investment, Bitcoin has returned 179% over the past 10 years, while the S&P 500 has returned around 10%. Which one looks more like a scam now?

Fraud is awful, I have been defrauded, so have close friends, and members of my family, and I can tell you, it's no fun having to explain to your spouse that your hard earned cash has been lost, or worse, you were promised more money in return for your work, and got stiffed. Time is money, money pays for time, and if you continue to receive money for your time, you'll be hard pressed to break that cycle.

Investments in *ANY* speculative market should *ONLY* be invested in with money you are prepared to lose. How ready are you to trade your money for a chance to make 179% return? The lesson here is be skeptical, but if you're not

ready to lose that cash, keep it in the boring old bank, for now anyway.

Is Traditional Banking Going Away?

Traditional banks are here for a while, but not much longer, vin my opinion. You already see drive through windows going away, and people behind the bank counter look more like monks preparing for a long cloistering behind quiet, solitary cells.

Money is changing quickly, and so are the institutions that manage it. Soon, a robot will be taking your deposit, if you still deal in cash at all, which is highly unlikely.

The pandemic of 2020 set the stage, and taught people how to manage their day-to-day lives

without cash. I cannot remember the last time I've had more than $20 in hard bills in my wallet.

Digital currency is becoming more accepted and regulated, not only by governments, but financial institutions as well.

In my book *"Demystifying Cryptocurrency ''*, I discuss at some length the central bank digital currency initiatives being enacted by many governments around the world.

To say I'm not a fan is an understatement. Whenever you turn over your control of your money to anyone, especially a large faceless bank, investment group, or worse, a government, you will be forever enslaved to the will of those who control your money.

I know I sound like an old codger when I say that "ever since we went off the gold standard, currency has gone to hell in a handbasket". Now you need to sell the handbasket to make up the difference for how much money has been lost to bank-controlled inflation, and probably start a side gig weaving new baskets.

Inflation at the government level is bad enough when they spend more than they take in, and then ask the Federal Reserve to change the interest rates.

Since the Federal Reserve is neither *federal* nor *reserved*, they do not have any obligation to do anything *ANY* government asks them.

The U.S. Federal Reserve is a private company, made-up of 12 regional banks, that have executive-making decisions about interest rates that benefit their board of directors, themselves, and their investors. I won't bore you with the details, you can look it up. But if you knew what you do day-to-day would dramatically impact your bottom line and that of your employer,how would you manage other people's money?

Cryptocurrency is not perfect, but it is also not managed by bank executives, for the most part. In the case of Bitcoin, it is managed by a group of engineers that have no ulterior motive, they are just interested in making Bitcoin one of the best possible digital alternatives to fiat currency that they can. Similar can be said for Ethereum and other currencies that are based on a productive utility or software as their main source of value.

Fiat currency is now worth what the largest banks in the world tell you it is worth. Giving bank presidents the power to determine how much interest to charge for money they lend is the very definition of the foxes guarding the henhouse!

Remember, money, actual real exchangeable goods, are worth what two people agree it is worth.

What About Crypto Fraud?

It's bad, but fiat currency fraud is FAR worse.

Next?

More about Crypto Fraud

Probably the most famous case in the past few years is of Sam Bankman-Fried and FTX. Here is a brief history:

In 2019, Sam Bankman Fried and his partner Gary Wang set up the FTX Cryptocurrency Exchange. By July 2021, FTX concluded a $900 million funding round, valuing the exchange at $18 billion, and have set up FTX.us, to exchange cryptos for U.S. dollars to American customers. They begin selling their own crypto coin, FTT, and sell to customers.

NBA's Miami Heat Arena in 2022 was sponsored by, and renamed FTX Arena

By the end of 2021, FTX becomes the second largest crypto exchange, and gets celebrities to do commercials for their company, then buys the naming rights to the Miami Heat's home stadium. It was a whopping 9-year deal, worth $135 million.

FTX, now a Bahamas-based cryptocurrency exchange, made FTX the first cryptocurrency exchange to sponsor a major professional sports venue in the US.

By September of 2022, Nishad Singh, former director of engineering at FTX, claims that SBF knew of a $13 billion hole in FTX's balance sheet. That's a pretty big booboo.

FTX is starting to look a lot more like a ponzi scheme, and things are going south quickly. Most of this was due to rumors that Binance, the #1 crypto exchange, wanted to acquire FTX, but they could not agree on a price, so the story goes. Binance removes FTT, the crypto of FTX from their exchange, and now panic selling sets in, driving a huge wedge in the confidence of investors and owners of FTX's crypto, FTT.

By November of 2022, FTX's customer withdrawals reach $6 billion, and the exchange pauses withdrawals. Binance pulls out of its letter of intent to acquire FTX, and SBF tweets that FTX is "fine" and that its assets are fine.

3 days later, SBF announces that Alameda will be winding down, and FTX and Alameda are bankrupt.

In February of 2023, SBF was arrested in the Bahamas and charged with criminal fraud. By March, FTX files for Chapter 11 bankruptcy protection in the US., and liquidators take over to repay all the debt of FTX. In June of 2023, SBF was sentenced to 25 years in prison and ordered to repay $11 billion.

Did SBF intend to defraud his customers? Was all that necessary to charge him with fraud, or was inept accounting enough? It was said that billions of dollars of transactions were managed by FTX using Quicken, not even Quickbooks for Business, but the consumer software, Quicken!

That admission alone should be enough to go to jail for just being dumb. Criminal stupidity, it should be a law!

The moral of this story? Competition is tough, ruthless, even dirty, but does that mean he was purposely trying to bulk people out of billions? Is it criminal that SBF's girlfriend, "Sweet Caroline" Ellison, was running a hedge fund, with commingled funds from FTX?
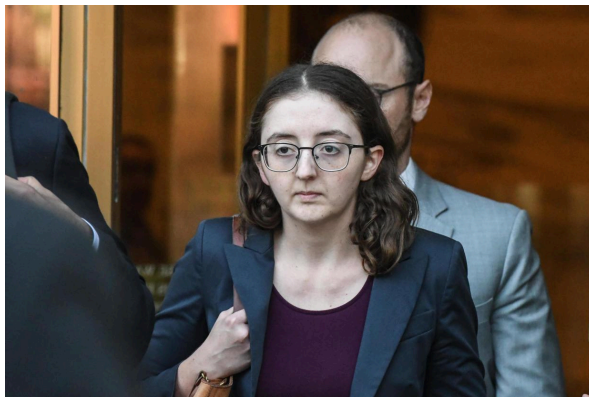
Yes, that actually was, and she threw him under the bus pretty fast. Is there still much more fraud committed by investment houses, mortgage lending institutions, government-sponsored banks, and other investment advisors? YES!

But, those examples are ignored or swept under the rug, and just choked it up to "white collar crimes".

Central Bank Digital Currencies

CBDC's are the root of all evil on the blockchain, in my less than humble opinion. If you think cryptocurrency exchanges are bad, imagine a huge group of bankers, with a banker mentality, banker training, and big banker attitudes, managing the digital version of the dollar, with the blessing of the U.S. Government, or European Central Bank, etc. etc.

European parliament building in Brussels,
Currently considering an EU Central Bank Digital Currency

Let's assume for the sake of argument that the Federal Reserve has hired a bunch of young mavericks with mad programming skills to create a blockchain currency to replace the dollar. Then, if you're feeling generous, the next thing they do is implement a system of checks and balances to make it secure, and apply some of the best features of bitcoin, and give birth to the largest replacement for money since Nixon removed the dollar from the gold standard in the 1970's.

If you're still feeling the good faith and trust of the **Federal Reserve** to do the right thing, now let's see who has control over the new digital currency, and what they do to manage the lending rates, the inflation rate, and your taxes, and when they're paid? What about taxes, do they now have the ability to change the tax rate, and who pays what, and when?   Do the new digitally throttled rules let you spend what and where you want to spend your money on, and then throttle those purchases that they disagree with?

How do you feel about the bureaucracies that have currently screwed up the economy to the tune of negative $3.5 Trillion dollars in debt, that they have your best interests at heart, or their own?

If you let any governmental body control how your cash flow and how it is managed, do you believe that you will have more or less freedom with your investments?

If you want to invest in an oil company, are you going to be allowed to buy a "less than favorable" investment in their eyes, or are the elected officials *that run the postal service* going to decide for you?

Are you scared yet? Good.

Personally, I think it is foolish to trust anyone with that much power, especially with our money. That being said, as a society, we've done this every time, and we allow those with a hairbrained plan to run things, and they never seem to work out for us. I tend to put my trust in people with a proven track record, and not rely on the type of minds that came up with the customer service model for the DMV!

Chapter 5 Blockchain Benefits and Pitfalls

It's no surprise that as soon as someone invents a better mousetrap, a better mouse comes along. It used to be that blockchain networks were so secure, it was thought to be impossible to hack. To quote Jurassic Park, "life finds a way".

The idea of your bitcoin account being secure should still make you feel safe, it is probably the best solution out there for redundant, encrypted, and <u>*byzantine fault tolerant security*</u>*[3].

The issue would normally be moot, but an entire industry of "crypto recovery" has sprung up around the fact that humans are fallible, and

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[3] Byzantine Fault Tolerance is a property of a distributed system that enables it to function correctly even when some nodes in the network are faulty or malicious. In other words, it is the ability of a system to reach consensus and maintain its integrity despite the presence of failures.

will lose their passphrase to recover access to their crypto repositories.

There are heartbreaking stories of folks who have stored millions of dollars worth of bitcoin on old machines, and did not backup their passphrase, and lost it all. The nature of the blockchain prevents brute force attacks, and the encryption hash is so large, it used to take 100,000's of hours to crack it with traditional methods.

One man threw out his laptop a few years ago with his recovery phrase, and spent thousands on hiring people to help him dig through the public dump to find the laptop! He had 100's of millions worth of bitcoin, so, in a way, I guess you can say he's "digging for digital gold in the dump"! I recently read an article where he partitioned the city council to let him buy that trash heap, to aid in his recovery efforts. Poor guy.

Also, a major selling point of the security around using the blockchain was that it is so well monitored and maintained, that if one transaction in the ledger was suspect, the "minors" who maintain it would automatically flag it, vote on it, and reset it back to the time when they all had consensus that it was valid and secure. WOW! That's pretty robust security! In fact, the blockchain that hosts Bitcoin itself has never been *really* hacked.

User wallets, service providers, and exchanges vulnerabilities have been exploited, so technically, any Bitcoins that have been "stolen" are due mainly to "user error". This is a significant distinction, primarily due to the fact that the weakest points on any "chain" are usually man-made flaws.

If you lose your keyphrase, or leave your laptop open and walk away, expect to have some data leak out, at the very least. Hint: Buy a cold storage wallet, and lock up your passphrase in a safety deposit box!

Passwords suck (see Demystifying Cryptocurrency), but they are still necessary. Use only secure passwords, lock screens, and 2-factor authenticators on any system that has access to your funds!

Identity Theft

It's worth mentioning that your ID on a blockchain can also be secured, and depending on what method, wallet, system, or utility you use, it is probably still the most secure way to store your personal or private information.

The nature and fallback security applied to the encryption of a blockchain means when you prove you're you, your accounts, banking, crypto, and other financials are just about as secure as they can get, without burying all your wealth in a treasure chest somewhere in the Atlantic. (And it's a lot easier to get to as well!)

Digital USB "Hot Wallets" are a good alternative to lost passwords that are instantly accessible by crypto debit cards

That does not mean that people have given up on trying to take easy money from you. The amount of fake IDs created by people with nefarious plans, trying to spend money in your name, to the tune of millions of dollars a day.

That still pales in comparison to normal banking fraud with systems that can be hacked into easily websites that have insecure account information, with bad passwords and other security flaws. The blockchain is not the Panacea for this. But it does a pretty good job of

allowing people to create new pathways and unique ways to identify themselves and access their data.

AI on the Blockchain

AI would have to know about blockchain to be worth anything to the new Web 3 world. In fact, it would have to play a huge role, almost like a librarian keeping track of all the new bits of digital knowledge, and indexing it so we can retrieve it in a nanosecond.

In this case, AI is implemented to interact with strange websites and unusual methodologies, unfamiliar territories and locations, where your data is stored that you may not be comfortable navigating, mainly because they don't have a pretty graphical user interface with access to all your favorite links. How are you going to navigate the AI world?

Enter the Metaverse

I think this is a great time to segway into the merging of the Blockchain and AI, and that's a little place that we like to call *the Metaverse*. What exactly is the Metaverse, and why is AI important to it?

Web 3 as I mentioned before is the definition of a new version of the old Internet, with a twist. YOU OWN what you create in Web 3, and AI is going to help you keep track of it, and the Metaverse is how you will navigate it and experience this bold new world of digital living.

The only way to get there is through the enclosed space over your eyes, inside the Virtual Reality Headset.

Like the actual Universe, the *Metaverse* is technically unending, unlimited, and restricted only by our digital imaginations, and computer limitations. Too vague? OK, picture it this way:

The physical universe, the one you live, play, and eat in every day has a twin online. The "mirror universe" (hat tip to Star Trek) is a bit more esoteric, with Avatars of flying people, weird architecture designs that defy gravity, and moon bases where you can "own" a plot of land, and build a space-condo. I realize that is not a mirror of this world, but we're pretty close!
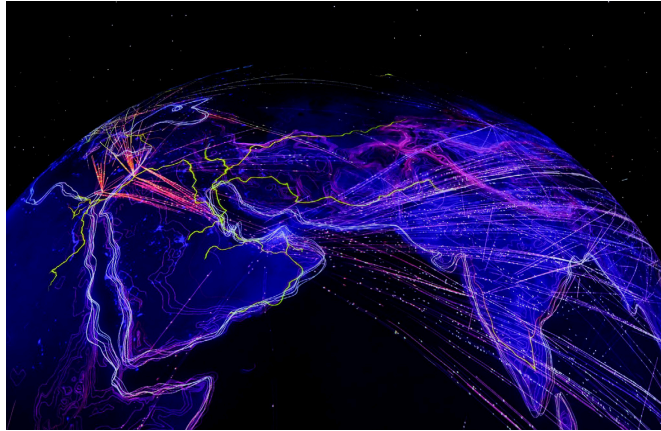
This digital representation of a virtual graphical world has already been created to a degree, multiple times, and property is already up for sale by virtual real estate agents.

Who owns it? Whoever stakes a claim with a digital deed! There are gathering points for social interactions, virtual stores selling digital clothing and "skins" in games, weapons upgrades, as well as access to real world items for sale. What's the coin of the new realm? You guessed it, crypto!

Chapter 6 - IS the Metaverse Already Live?

Some fairly accurate movies currently representing a Metaverse are "*Ready Player One*", and to a lesser extent, the funny Gamer movie "*Free Guy*". Both represent a MUCH greater achievement in VR than that currently exists in technology, but the improvements as Graphics Processing Units (GPU's, most famously NVIDIA) and PC's are getting faster and more predictive, allowing for smooth rendering and predictive analysis.

V.R. - The Early Days

You can't get into VR without discussing a bit of the history of this groundbreaking display tech, without talking about how the groundwork was laid. The entertainment industry was doing its job, trying to lay the groundwork that man will eventually be the author of his own destruction by inventing tech that will ultimately be his undoing. Enter *"The Lawnmower Man".*

Cut the Grass, Then Take Over the World

Before the VR gaming craze was even a toddler, the movie that did the most to bring attention to the nausea inducing arcade games was *"Lawnmower Man",* released in 1992. I remember going to the theater and thinking "wow, this is going to set back the VR industry decades", mostly due to the underlying message that "technology is bad, VR is evil" theme that was hyped throughout this horrible movie. That being said, I did somewhat enjoy the movie, proving that I am just as susceptible to the brainwashing as the average entertainment-starved moviegoer of the time.

The plot was fairly well laid out; a scientist, played by a long-haired Pierce Brosnan, was working on a formula to enhance the brain, using a VR interface to assist in directly reprogramming the brain. His first experiments on chimpanzees were promising, until one escapes and kills a guard. (The apes were being trained as expendable soldiers, and VR had taught them to eliminate threats.) Enter the Lawnmower man.

Jeff Fayhe, a mentally disabled ward of the local church, who could barely tie his own shoe, was selected to be the first human trial, and all kinds of hilarity ensues.

Spoiler alert - Lawnmower Man becomes all-consumed by the technology, and Scientist Larry (Brosnan) has to eliminate him to save the Internet, and ultimately the world.

Jeff Fahey and Pierce Brosnan did a fair job, but overall, I could not get past the idea that Hollywood loves a good tech-bashing theme, and I'm sure they made the writers rewrite it to make it more dismal and apocalyptic, thus fitting their time honored trope that AI will kill the world in the end.
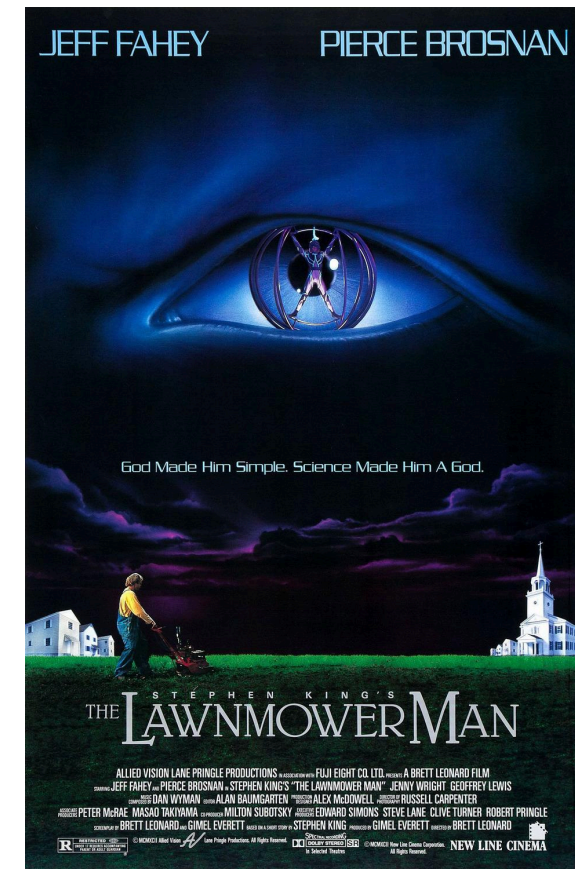
Second Life Vs. The Sims - What's Next?

Philip Rosedale is one of the few people in the world who can genuinely be called a metaverse pioneer. He founded the company behind Second Life, arguably the closest thing we have to the metaverses first described by sci-fi novels. The Massive Multiplayer Universe also called "Second Life" is a 3D world in which inhabitants become custom avatars, socialize, create entire cities, and run actual businesses. It went nearly two decades without much direct competition, then interest started to wane. Without enough users to continue to maintain any community, real or virtual, they will eventually fail.

But never fear, Second Life has gotten a second life! A new, stable version of the server code was uploaded in September of 2024, and gained new user interest, new apps, and more add-ons

for a sleeker new user experience. VR, A.I., and Blockchain to the rescue once again!

[4]VR Today - Is it Mainstream yet?

META, parent company for *Facebook* and *Instagram*, (not to be confused with the actual metaverse), spent tons of money to create VR goggles, and ended up buying the best-selling version of Oculus VR, the company that created the first acceptable version of VR called Oculus Rift. Facebook acquired the company for $2 billion dollars in 2014. They became the VR goggles of choice for gamers and virtual world developers. Facebook continued to develop the headset, and as far as clunky, heavy, vision-obstructing goggles go, they're still the

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[4]

https://www.reuters.com/technology/essilorluxottica-expands-smart-glasses-partnership-with-meta-2024-09-17/

top-seller. I've used these, and after a while, you really feel like you're in another world.

Could this be the next "big thing" in computing? Immersive experiences in VR at the workplace.

That realistic feeling could be the nerves in my neck going numb and affecting the blood flow to my brain. The jury is still out on that.

The Folly of Apple Vision Pro

It's not a big secret that I've not been a fan of Apple, pushing style over substance, but the $4k price tag of their "Mixed Reality" headset dubbed the "Apple Vision Pro" was a novelty splash in the pan at best.

The interface is cool, the graphics are sleek and refined, but the cartoonish avatars and creepy front-facing screen eyeballs turned off most people, and at $4,000.00, only the elite, and media kiss-ups got to wear them, and tease the rest of us while auto-driving their Teslas with the headset on.

Yes, that really happened, Google it for several fake, staged videos that made everyone cringe.

Apple Vision gave you "creepy" digital representations of your eyes, not your actual eyes.

Just before publication of this book, Apple pulled the plug on future development of this ill-fated attempt, in favor of something a bit more streamlined and less whiplash-inducing.

Using Augmented Reality (AR) for a computer interface may become as mainstream as monitors, but for now, take the damn fool huge headset off walking across the street, against traffic, on your way to Starbucks!

The Future of VR

In most cases, the preconceived notions that new tech will eventually go evil on its own and enslave the entire planet comes from the imagination of science fiction writers, with very few exceptions.

Even those exemplary examples of *optimist futurists (which I am proud to say I have been grouped in with),* have created fiction that shows a utopia of digital helpers created to make human lives easier, like Star Trek, and Isaac Asimov's Robot series Foundation, that have set forth the idea of the "3-laws of Robotics'', and Metropolis, the first Sci-Fi horror thriller that became ruler of a future earth.

All of these stories end the same, and have eventually turned on themselves, like the snake eating its own tail. (Named Ouroboros).

It is a self-fulfilling prophecy, ensuring mankind learns the lesson that whatever we create must eventually destroy us, so that we learn the lesson to practice restraint and be humble with our creations.

Chapter 7 - Why I am not Afraid of VR or AI

NOT ONCE has a talented engineer designed a system that was so smart it was capable of toasting bread without eventually burning it, prompting designers to make better toasters, and improving on the original design, even though a simple toaster usually functions perfectly well.

With all the new A.I. backed PC systems being released at the time of this writing, it won't be long before real world tech catches up with Sci-Fi again.

At the time of this writing, Open AI, the Microsoft-backed leader of the current, most dominant, commercially available, subscription-based GENERATIVE A.I. called *Chat GPT*, is being challenged by literally *DOZENS* of new startups, and backed by BILLIONS of dollars

and huge tech firms, with tech-savvy programmers that are hell-bent on dethroning the king. Since the first edit of this chapter, Elon Musk's Grok from X-A.I. overtook Chat GPT in speed and coolness factors, much to the chagrin of Open A.I., who rejected a buyout bid from Elon early in 2025.

Funding for most large tech projects is drying up, mostly due to economic factors and risk-averse bankers, but A.I. is the new Crypto of 2024. Open A.I. is rumored to be launching the next evolution in the Generative space, with GENERAL A.I. closely nipping at its heels.
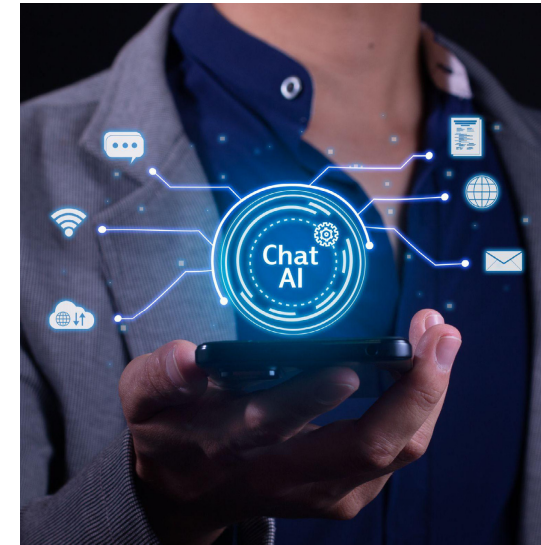
Interestingly enough, General A.I. has been called out by the online magazine "Techcrunch", stating that "*Microsoft and Open AI are defining Artificial General Intelligence, based on the startup's profits, with [5]A.G.I. likely being years, if not a decade away.*"

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[5] Techcrunch article on A.G.I.
https://techcrunch.com/2024/12/26/microsoft-and-openai-have-a-financial-definition-of-agi-report/

After typing the above statement, just to show how fast the A.I. advancements are coming, Microsoft had a breakthrough with a Microsoft chip.

Microsoft unveiled Majorana 1, a quantum chip the company says is powered by a new state of matter.

The new chip allows for more stable, scalable, and simplified quantum computing, and made claims that it was "just as revolutionary as the silicon transistor."

They further claimed that this would push the Artificial General Intelligence timeline up to a few months from now, as opposed to 10 years or so.
Updated Feb 19th 2025

The next version of Chat GPT, known as GPT 4.0, will have a much more intelligent interface, voice responses and swappable voices, as well as a fancy "thinking" module, to help give it fewer hallucinogenic responses, and better contextual answers.

Chapter 8 - Should You Fear A.I.?

OK, let's face it, humans are notorious for creating things to make it easier to destroy themselves, but is that always true? Do we not see medical and humanitarian advancements that are made possible by the technology we create? Why is it that every time we talk about Artificial Intelligence, we assume the worst is going to come from it? Because we have hope that things will be better, but experience teaches us that we're fallible, and in so being, likely to create something that is also fallible, and will want to murder us. Really? I'm not

surprised at the conclusion, but let's break down the likelihood of this.

The short answer is we have fantasized about it for decades. The entertainment industry has been predicting the downfall of mankind since the first Sci-Fi movie by Friz Lang, released in 1925 called "Metropolis", which was, of course, about an A.I. robot that enslaves mankind. Look for the updated version due out in 2025.

Sci-Fi robot "Maria" from the movie Metropolis in 1925

It does not have to be this way. In fact, I cannot conceive of a way to actually make that happen, given the state of things today.

Think about it logically for a moment. How many computer engineers have the will, or the personality type, to become an evil super-genius? If you want to talk about stereotypes, picture the programmer, huddled over his keyboard, staring into the black hole that is his monitor, with the green-glow from his screen reflecting off his pallid complexion. Lex Luthor he is not.

So, you think he's going to create something that will grow out of his control, a program to go out and do his bidding, and unleash his revenge on mankind? It's much more likely he'll invent a transporter to have a pizza beamed to his desk on demand. If you had the money, and were an amazingly talented coder, would you be Batman, or Lex Luthor? When you can be Batman, you'd choose Batman, every time.

Speaking of Lex Luthor, despite all the hand wringing from conspiracy theorists, there has yet to be ANY evil-genius super-criminal mastermind with the resources or intelligence to create a computer system, within the current limitations of technology, that can properly dispense yogurt without millions of lines of code, all that had to be entered, checked, debugged, rechecked, and then, fed pizza (because the programmer runs on pizza, right?).

My good friend Matt S. likes to take the counterpoint with me on this, and he often says "…but you know that Kim Jong Un could fill a stadium with programmers that he could force to work on this, 24 hours a day, until they came up with something truly diabolical".

OK, I mean maybe he could, but I've yet to see any fortune 500 North Korean programming firm, let alone a stadium full of advanced Asian AI developers. If this were possible, and the slave-labor driven, pizza-fueled nerds all happened to be in North Korea at the time, I'd bet more money on the idea that they are building a rocket-powered computer chair to blast them out of there and on to a moon colony somehow.

The most sophisticated A.I. systems currently exist in America, fueled by greedy capitalist investors that have provided bakery fresh pastries, fully-stocked snack stations, $5,000 espresso machines, and personal chefs to keep all truffle/vegan pepperoni/lactose-free cheese pizzas warm while they code. Nap stations are not uncommon, usually located right next to the laser tag arena.

 So you see, if it takes that much effort and bribery to keep the pallid skinned nerds corralled in one area, I'll take my pizza Chicago style please.

Chapter 9 - A.I. and Politics

President Trump was recently sworn in again, and promises to reinvigorate tech, crypto, and A.I. policies in the U.S., and that he was nominating the podcaster and former PayPal chief operating officer David Sacks to be his White House artificial intelligence and crypto czar. Trump wrote that "Sacks will focus on making America the clear global leader" in artificial intelligence and cryptocurrency, which he deemed to be "two areas critical to the future of American competitiveness." He also stated that Sacks will "safeguard Free Speech online," "steer us away from Big Tech bias and censorship," and "lead the Presidential Council of Advisors for Science and Technology."

Of course, all you have to do is yell "Trump" in any crowded newsroom, and quasi-reporter types will quiver and lose control over their bladders. The Slate news site said "He'll (Sacks) now continue to have the president's ear, without having to go through a Senate confirmation, and he'll be able to directly connect crypto and A.I. executives with the president for whatever they need, whenever." As if that has not happened for the past 4 years. Not to get political about it, but, remember who the Democratic party's largest donor was in 2020? None other than convicted former FTX CEO Sam Bankman-Fried.

The next president will also face a challenge with the vast amount of tech workers who were told to go home during the pandemic of 2020. In fact, about 80% of the government workers who went home, never returned to their office space, leaving at least 60% of government buildings either under-occupied, or completely vacant! The real issue is how are you going to get your mission done, when you can't effectively manage or monitor your troops? This is one of the many hurdles the 2025 White House will have to address.
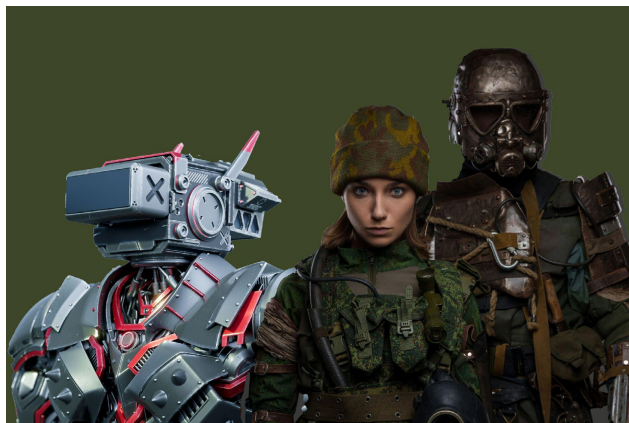
The EU and A.I.

The EU has already established a comprehensive framework for AI development and deployment, focusing on ensuring trustworthiness, transparency, and accountability.

This framework is guided by the European Commission's Communication on Artificial Intelligence for Europe (2020) and the AI Act (2021).

It basically says that all A.I. developed in the European Union must comply with the following:

- Explainability: AI systems must be transparent and provide understandable explanations for their decisions and outcomes.

- Accountability: AI developers and users must be held accountable for any harm caused by AI systems.
- Human oversight: Human oversight and control are essential to ensure AI systems align with ethical and legal standards.
- Non-discrimination: AI systems must not discriminate against individuals or groups based on protected characteristics.
- Data protection: The EU's General Data Protection Regulation (GDPR) applies to AI systems, ensuring the protection of personal data.

On a personal note, it is very typical of a body like the EU to over regulate something they fear and do not fully understand. This will certainly constrain development and advancement of these technologies, and will also inspire other governments worldwide to adopt similar constraints. I'm sure it's no surprise that I am not in favor of this type of ruling by paranoia.

Since the adoption of these rules, A.I. systems are far more advanced and beyond the scope of this body's decisions. It is likely to be amended, and several slow, expensive, and arduous arguments trying to explain to politicians why their fear will stifle development of even certain life-saving applications that A.I. is already solving faster than the scientists can throw at it!

U.S. A.I. Policies and Politics

Currently, there are *NO* established guidelines, laws, or official bodies to regulate or control A.I. in America, as of December 2024. President Trump did establish the Select Committee on Artificial Intelligence and directed federal agencies to develop AI-related plans and strategies. Not one of them has been implemented by President Biden's administration. I'm not really upset about that,

for the same reasons I stated above about the EU's policies. I believe we should continue to be vigilant, ethical, and methodical, but, the more you regulate something, the less of it you get of it.

Chapter 10 - Marc Andreessen's Techno-Optimist Manifesto

I'm happy to say, I share something in common with Marc Andreessen. No, it's not just our mutual love for Belgian Waffles, it's that I too, have been called a *"Tech Futurist with an*

Optimist Outlook". Yep, once you're labeled, it sticks with you for life.

The reason I point this out is that Marc has been in the spotlight for his opinions on how A.I. will impact humans, our cultures, and, at the very least, make us better at having a positive impact, while we exist for such a short time on this little blue ball, hurtling through space.

A little bit about Marc before we delve into his opinions, and how the media is *distorting* them. (I sense a recurring theme here)

Andreessen is currently the co-founder and general partner at Andreessen Horowitz, a prominent venture capital firm. He has invested in and advised numerous successful startups, including Facebook, Twitter, and Airbnb.

He is probably most famous for co-creating the Mosaic internet browser, which played a pivotal role in making the World Wide Web an easier place to navigate, (web 1.0). He also co-founded Netscape, which was later sold to AOL for $4.2 billion. If that were not enough, this underachiever had to go out and co-found Loudcloud, which became Opsware, and was sold to Hewlett-Packard for $1.6 billion.

So, I believe he knows a bit about revolutionary tech, since he has had a hand in creating a big chunk of what we use day-to-day online.

Marc is a great follow on X (formerly Twitter), since his views are similar to mine, I tend to get a chuckle out of how he glosses over the mundane, day to day minutiae that so many other X accounts thrive on, and throws out his take on tech for everyone to absorb.

When someone says something about Marc, I feel it is usually from one of two camps. Fan-boys (which I have some small tendency

toward, since we think so much alike!) and that of pure jealousy. Not uncommon for a visionary to suffer the slings and arrows, as self-made billionaires often do. I believe Marc is getting signals on a different frequency, and more of us would do well to try to tune in, turn on, and learn more.

So at his company website, https://a16z.com/the-techno-optimist-manifesto/ Marc published his "***Techno-Optimist Manifesto***" in 2023, that reads something like a cross between the "business plan" from Jerry McGuire (a great film, if not a bit sappy), and a Utopian Tech Community of Tomorrow, E.T.C.O.T., built by a second coming of Walt Disney (if only!)
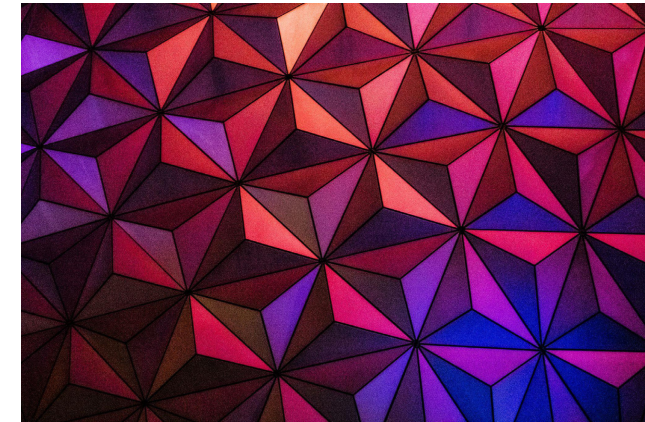
EPCOT iconic geodesic dome at the center of the Disney park in Orlando, FL

I say this with great admiration and love for his work, both Marc and Walt, because like any great advancement in society, we must *BELIEVE* in a better future, not some bleak, dark, and tech-enslaved Matrix world, where we are mere batteries for our mecha-squid overlords.

One of my favorite quotes from the manifesto is *"Techno-Optimists believe that societies, like sharks, grow or die".* Every great advancement in society is met with resistance, fear,

trepidation, and a general sense of doubt, because that is how we are wired.

To paraphrase Dory, just keep moving, or die!

I love another quote, attributed to author David H. Hargreaves, who said "The only people who like change are wet babies". So quit being a baby, and embrace the change, before you end up in diapers.

Summary of Marc's Vision

Marc's Techno-Optimist Manifesto I believe was an expression of love for technological advancements that mankind has given to the world, in an effort to make life easier for all mankind. There are several themes expressed that make me believe that it is this kind of forward-thinking that gives those of us who embrace tech hope for a better future, with less suffering, hunger, and jealousy, and hope for understanding, knowledge, and peace in our lifetimes.

A.I. can be as biased as any of the data that it studies. The quote below was provided by the secure search engine "Brave", based on the Chrome browser code from Google. It researched thousands of comments, reports, and websites for information I put in to give me a summary of Marc's manifesto. I can't say I

was shocked that it found one particular article that had negative things to say about his lack of consideration for underprivileged people, and presented supporting "evidence" to make the point.

"Overall, the Techno-Optimist Manifesto represents a provocative and contested vision of technology's role in shaping the future. While it has sparked important conversations about the potential of technology, it has also been criticized for its narrow focus, lack of consideration for risks and ethics, and elitist undertones."

It did, however, start out with the statement that Andreesen believed in an *"unencumbered technological development of AI and the free market as the primary drivers of growth and improvement, and that technologists should lead the way"* : Andreessen believes that technologists, particularly those in Silicon Valley, should take the reins in shaping the future and solving global problems.

I'm still not sure I would rate that as a "fair and balanced" assessment of this document.

Vice President J.D. Vance's Speech on A.I.

It's pretty clear that the Executive branch of the U.S. Government has some pretty strong opinions, and policies, regarding Web 3 and A.I.

Vice President JD Vance gave a speech at the A.I. Action Summit in Paris on February 11, 2025., just shortly before this book was published, and it made quite the splash. Not surprisingly, the world did not look entirely favorably on the stance that the VP took, as it was mostly American forward.

He outlined President Trump's "America First" approach to AI, saying that the U.S. will dominate the technology in terms of chips, software, and rules. No big surprise here, but the U.K.'s Prime Minister Keir Starmer said virtually the same thing a month ago, to barely a whimper, from anyone other than the mainstream media. The rest of the world knows we're going to lead in tech, they just don't like to be reminded of it.

The Veep warned European leaders to dismantle regulations on A.I. and align with the U.S., to avoid falling behind authoritarian competitors, like China, which he came right out and said that they would exploit AI for their own gain, and implied that they would cheat if necessary!

Vance also argued what I have been saying all along, overregulation could stifle innovation, and we should take measures to see that freedoms are protected, and that AI remains free from ideological bias, in general.

As suspected, most of his comments were met with polite applause, or dead silence, as many of the Ministers and Sinisters in attendance are openly anti-American, or at the very least, opposed to this particular administration. That being said, this idea of embracing A.I. is a significant shift from the previous administration's focus on AI safety and regulation, emphasizing the opportunities AI presents for economic innovation, job creation, and national security. Quite the opposite from the typical politician's stance on tech that they

don't fully understand. From my perspective, that's pretty refreshing!

Why Do We Fear A.I?

It is also *MY* belief that A.I. may be a step in the right direction. Is not the evil it is portrayed to be by governments, the news and entertainment media, and science fiction writers make it out to be. My main reason for that belief is that *EVERY SINGLE ADVANCEMENT* has been met with the same resistance, fear, and doomsayers.

BECAUSE WE ALL FEAR CHANGE!

Resistance is FUTILE

Even after the implementation of AC power for homes was proven safe, for almost an entire generation, people were afraid their houses would burn down, or worse, spring to life and swallow their children! Needless to say, those who embrace new technology, eventually outlived those who fear it, and the advancement of the human race on any climate on the planet was made more palatable by climate controlled houses which led to easier lives, more restful nights, and a more productive workforce.

Tesla VS. Edison

During the Industrial Revolution, people like Tesla and Edison made their case for each of their versions of world-changing technology, "A wire connecting every home" Electricity was exciting and new.

The Battle Royal for Electrification

DC for Edison, and AC for Tesla. They fiercely competed for market share, and using fear as a motivator was not out of the question for someone like Edison. Edison paid a man named Harold P. Brown to conduct experiments, who used AC current to demonstrate its supposed deadliness. These demonstrations included electrocuting animals such as cats, dogs, mules, and horses. After a time, it was a wasted effort, as AC lines were run, but Tesla was ruined by it all, and died penniless.

At our core, humans only achieve great things when we overcome our inherent fear. It is instinct, protection, a need to not be too optimistic, for fear of being disappointed. We never know what disappointment lies ahead, so we might as well not expect too much from life.

A.I. may not be the salvation of mankind, but I believe with growth, optimism, and hope, we will rise above our programming, and evolve into a creature that vaguely resembles those cave dwellers that we still act like every day.

Chapter 11 - Robots and Empires

The American author Issac Asimov is best known for writing an optimistic version of future history about Robots, ending with a series of epic novels that predicted an Empire of oppressive generational clones, manipulated by robots (The Foundation novels). Best known for his "three laws of robotics" that simply states the following;

Prolific Author and "3-Laws of Robotics" inventor Issac Asimov

- The First Law: A robot may not injure a human being or, through inaction, allow a human being to come to harm.

- The Second Law: A robot must obey the orders given it by human beings except

where such orders would conflict with the First Law.

- The Third Law: A robot must protect its own existence as long as such protection does not conflict with the First or Second Law.

This was a pretty revolutionary concept for the time, given we were a world at war, and the newly partially mechanized factories were mostly responsible for us dominating the battlefield, it was not a very optimistic time, and this guy had the audacity to envision a future where robots were actually looking out for us!

A.I. and its Impact on the Arts

Asimov's optimism notwithstanding, we did the best to destroy ourselves, but as humans do, we adapted and overcame. We are really bad at learning our lessons collectively, and as societies do, we tend to repeat the same mistakes. Given the collective consciousness of our species, it's likely we're going to do some amazingly awful things to one another again, because history not only repeats, it has a really bad memory. We like to think that we evolve, but recent events prove we're the same as we ever were.

So, why am I still optimistic about A.I. not becoming aware and thinking we don't deserve to live, and should be replaced by the artificial? Because we are creative. We created all the wonderful things, and yet, we somehow created all the horrible things as well. So our memory

of the evil that spawned from the good haunts us, and continues to guide us, providing us a point of reference, and with great optimism, we continue to create. By creating, we are continuing to strive to try to emulate the creator.

Even the prequel to Frank Herbert's Dune book series, on Prime TV, "Dune: The Prophecy" is a look at how AI and Robots are banned, after a war against the "thinking machines" nearly led to the downfall of the human race. Here's a plot twist, (and a spoiler alert), AI tries to kill humans, humans ban AI, then, a group of powerful women trying to manipulate the Empire, use AI to map all the genomes of the royal ruling families, and plot to breed the best possible combination of mating outcomes, for them to be able to manipulate future leaders, and secretly be the power behind the thrones of the galactic empire.

Is AI the real villain, or the moraless witches in a massive cabal, bent on dominating weak men?

Is it really prophetic, or a thinly veiled warning that ultimately, mankind is doomed, because we're too predictable and stupid to make our own choices, especially when it comes to who we love, and how we breed? Strange, seems to be another example of a recurring dream.

The New Digital Age is Born

What happened in 2007 changed how we publish information forever. The writers in Hollywood for movies and TV went on strike, for the most part, because they finally saw the writing on the wall, and they were going to be cut out of their fair share of profits from the content they were creating for the major studios and TV shows.

Something amazing arose from that strike. People were still demanding to be entertained, and they turned to the Internet.

I believe this is a pivot point, not just for entertainment and technology, but for access to information in an instant, and the trajectory of human history was changed forever.

The web was still in 2.0 mode, but from that, arose the need to expand and increase the speed at which content was delivered. Music was being downloaded, but not "over the air" and on-demand, as it is today.

I was experimenting with the early days of Podcasting, and found it nearly impossible to maintain a video stream, since high-speed uploads were expensive, and not readily available. And mobile downloads, you could just about forget about it.

Enter the cellular speed push. AT&T was upgrading cell service to include data packets, and with it, more connections, more bandwidth, and more money. They had one of the best transmission rates, and 3G data-enabled mobile phones evolved into the new Smartphone.

One of the first laptop-ready Cellular Internet cards, with AT&T, allowed you to connect to the web anywhere you could make a cellular phone call

I was fortunate enough to get my hands on some of the first data-enabled phones, and beta-tested several models for AT&T and

T-Mobile. Those were the heady days of email on the go, and I had the keys to the kingdom of high(er) speed cellular data! I also held the record for the first internet talk show wireless caller, to the E-Yada network in New York from Tampa FL. That and $6 will get you a cup of coffee.

I recall this for all of you, to point out, for the first time in my recollection, we had demand for entertainment that would drive a tech advancement, and push the innovation of higher speed internet access, on the go, as well as at home. Cable internet gave way to fiber optic, and eventually, wifi throughput increased enough to keep up.

So, all in all, how did the entertainment industry push the development of new tech that eventually gave birth to VR, AI, and Web 3? It was a rag-tag team of performers that set out to produce a viral podcast show called "*Dr.*

Horrible's Sing-along Blog". More on that in the next chapter.

Chapter 12 - Witer's Guild Strike: Cause and Effect

Causes of the Strike: WGA's demands for increased residual rates for DVD sales and jurisdiction over and residuals from new media, such as online streaming and downloads.

The Strike's Impact on Television

As a result of the writer's strike, many of the scripted shows shut down production and some were being cancelled or postponed. Reality shows and unscripted programming were not affected, and some networks used the strike as an opportunity to launch new reality shows. Ironically, the most popular of these shows was "The Apprentice", which made Donald Trump the most popular personality on TV, and the

most famous phrase "You're Fired!" the most overused catchphrase ever to be born on TV.

Key Events and Dates

- November 5, 2007: The WGA strike begins.
- December 2007: Many scripted shows shut down production.
- January 2008: Some networks start airing new reality shows.
- February 12, 2008: The WGA and the Alliance of Motion Picture and Television Producers (AMPTP) reach a tentative agreement, and the strike ends.

Outcome and Effects

The strike resulted in a new contract for WGA writers, with increased residual rates for DVD sales and new media. The strike also had a lasting impact on the television and film industries, with many shows and movies being delayed or cancelled, and some writers and producers losing income. But the biggest impact was yet to come, the popular rise of *PODCASTING.*

Dr. Horrible and the Rise of Podcasting

I'm sure when Joss Whedon set out to write a musical, he thought to himself "Hey, how cool would it be to get that guy who played Doogie Howser on TV to play a bad guy, and make him sing in a musical number?" Well, as it turned out, pretty darn cool. So Joss enlisted his brothers, Zack and Jed, who did the shooting and music, and a plan was hatched to save the internet from the doldrums of slow-speed and low interest content.

This delves a bit into the obscure, with some side stories about entertainment and Hollywood business, but bear with me, I promise I'll make it come back around full circle.

Dr. Horrible's Sing Along Blog was one of those pivot points I spoke about earlier. By itself, it was nothing revolutionary, it was funny, it had a believable Hero named "Captain Hammer", who's epic story was portrayed by Nathan Fillian, complete with damsel in distress, played by Felicia Day, and a villain, Dr. Horrible, in the miscast visage of Neil Patric Harris. Honorable mention goes to Simon Helberg of Big Bang fame as his sidekick "Moist".
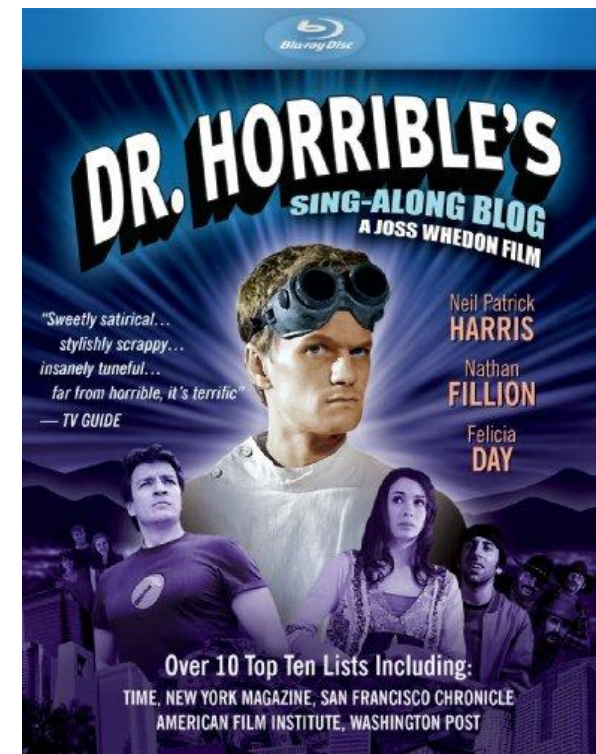
It was produced on the cheap, less than $200k, and within the boundaries of the writer's strike agreement, so the actors honored their commitment by working for defrayed pay, and the idea of self-produced, self-published, subscription content was popularized with a very clever distribution model. Podcasting was

getting a spark of life breathed into it, as everyone craved new entertainment, and Joss and Co. provided it.

What it did was the truly epic feat that I believe to this day changed the Internet forever, and set the stage for a massive shift in digital content management.

Podcasting and Subscription Content as Web 2.0

The amazing feat achieved by The Whedon brothers was epic in its own rights, for a few reasons.

1. Because they were bored, and wanted to work with who they liked, Joss and his brothers found a creative way to produce and distribute content.
2. It was released in a way where most of the expenses would be paid by Joss, and proceeds would go to the actors and crews after they paid the nearly $200,000.00 it took to create.
3. They did this out of respect for the strike, and released the whole thing in short 15 minute episodes on iTunes, one of the only ways available at the time to download and view video content legally.
4. The new "stream to device" of choice was an Apple iPod, and only on Apple iTunes, and podcasting exploded overnight as a result. In fact, that is why it's called *POD*-casting, because you needed an iPod at that time to download the content, pre-streaming capacity.
5. There were reportedly over 7 million downloads in the first weeks after its release.
6. People signed up in droves for iTunes, skyrocketing its popularity, and cementing its place among the most popular streaming apps ever.
7. People waited not-so-patiently for the downloads, because 2008 internet speeds were notoriously slow, and usually accompanied by an unmistakably horrible modem-screech-noise on your standard phone line.

8. The producers and studios took note, and realized their time was up. It was time to rewrite some contracts, and give up a bit of the cheddar to the content creators. They conceded the fight, and gave the writers DVD and digital rights.

At the time, I had already started a popular podcast called "Find and Convert" made famous by Bernie Borges with the same company name as the show. We were discussing modern Web 2.0 marketing techniques, and gaining some traction with the *American Marketing Association* and various other trade organizations, by embracing this new platform as a way of reaching a hyper-focused group of fans of soon to be converted to your new customers.

This gave me the platform I needed to start streaming over the web using services like USTREAM, on a regular basis, from my Tampa (Ybor) based studios, on the newly formed MEVIO network, I launched "New Media News, that morphed later into "The Internet Podcasting Network".

IPN - "Podcasting for your Business"
WAAAY too early to gain big numbers, but landmark podcasting video content years before it was profitable.

I believe that Dr. Horrible was the impetus of the popularity of the platform called podcasting that set in motion the events that were to follow to allow people to create content, get paid for it, and own their work. The only thing that was missing was proof of creation, and a storage and retrieval system, and a cataloging system to keep it all safe.

I feel obligated to give a nod to "the Podfather", Adam Curry[6], who in my opinion was another pivot point in the advancements that made WEB3 possible, because if he had not created the Podshow network and publishing platform, there would not be the backbone of subscribable content in the form of RSS podcast feeds that gave us (me included) a break to make content that could be heard all over the world.

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[6] Adam Curry, MTV V.J. and "Headbangers Ball" host

Thanks Adam, we owe you more for your early work on this than we do Joss Whedon or Dr. Horrible, or virtually any other podcast host in history.

Now, enter Web 3 as we know it today. In many ways, it was the invention of the iPod, and the podcast's popularity, that drove the need for faster speeds, and the embracing of the video stream that led to the need for encrypted payment systems that led to the creation of a new Internet paradigm, known as Web 3.

Chapter 13 - How RSS Revolutionized Media and Set the Stage for Web3

Podcasting was designed in a way to allow large content to be subscribed to, and to facilitate the transmission of data over slow internet connections, for people who wanted to get updated content, like news, music, videos, or other episodic entertainment, delivered to them when it was released. This was the heart of Web 2.0, publishing content for a worldwide audience.

Due to the slow speeds at the time, Really Simple Syndication protocol, known as R.S.S., gave them the ability to subscribe to that content, and automatically synchronize new content when it was published. This was not unique to podcasting, but it helped bloggers and other hosts, as much as it did large file-size creators. In 2007, the Apple iPod was the device of choice that was used, until others followed, like the ill-fated Microsoft Zune, and other portable MP3 players that would download data while you were sleeping. The next phase would

be video podcasts, requiring much larger files, and greater download speeds.

Web 2.0 was born out of this relationship between content creators, or publishers, but it did not protect the content creators from theft, infringement, or abuse, so many content creators turned to YouTube or other services, that at least helped to give them some platform that was searchable.

YouTube did not give you the true attribution or credit for your work, and was not really a pure RSS platform, but many of the features creators were looking for were there.

Then there was the fact that it was owned by Google, and at the time, the Big G was not really living up to it's promise made by their company slogan to "Do No Evil".

When you take into account all the groundwork laid by Dr. Horrible and Adam Curry, it's no wonder that the demand for protections promised by copyright holders, like book authors and musicians led to the creation of

Web3. If publishing was the basis of the Web 2 revolution, then Web3 must surely be the ability to protect and prove ownership of said content.

Web3 is not purely a matter of encryption, but serialization. That is the basis of cryptocurrency, NFTs, and digital contracts, or Smart Contracts, that give us a platform to create, catalog, store, and prove ownership, as well as transfer ownership and stable record management on the blockchain. This leads to a whole new marketplace for digital data to be bought and sold, using digital currencies from decentralized banks.

Smart Contracts and Decentralized Banking

I cover a bit about this in both *"Demystifying Cryptocurrency"*, and *"Demystifying NFTs"*, but it bears a bit of review, especially since current events are making this conversation a bit more relevant again. President Trump signed a record amount of Executive Orders in his first 2 weeks of his second term, but none has had the impact on Crypto, Blockchain, and AI, like the ban of a CDBC in the American banking system!
Central Bank digital currencies are the very thing that cryptos were created to try to avoid.

Imagine, you have all your wealth in 4 big treasure chests, and decide to bury them on a secret island. So you go about mapping your treasure spot, get your tools, and begin to dig. Instead of digging 4 holes to bury all your ill gotten gains, you decide to dig one big hole, and put all that wonderful gold, silver, rubies and other valuables into one deep, dank, dark hole. And then, just for good measure, you go and burn the map, and forget where it was buried, "to better protect the treasures". That is about what it's like to move a nation's currency to a CBDC!

The main issue crypto junkies have against any government agency holding their digital assets

is Governments are more unstable than NitroGlycerin, or an Army bomb disposal tech in the middle of a divorce on 12 cups of espresso! Governments change, frequently.

Overhead view of the CDBC plan to protect your treasure.

Policies can change just as fast, as is evident with the 2nd Trump admin, so why would I give the keys to my digital treasure to ANYONE, let alone a governing body that has proven to be irresponsible with my taxes, let alone an entire

cache of wealth, that is already guarded by the most *secure encryption ever developed?*[7]

## Chapter 14 - How does Web 3.0 Get Along With A.I.?

At the moment, there are new applications being developed on the various blockchains that enhance access, encryption, and cross-functionality virtually every day, and A.I. is at the head of a majority of the development houses efforts to make a better program, a faster protocol, and do it all without finicky human programmers.

It's not just the mundane, or tedious jobs that A.I. will replace. If a company can save money by replacing a percent of their workforce with a

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[7] According to SciTechdaily.com, a new holographic encryption based on laser and AI neural nets is now the best encryption ever conceived, but with Quantum systems making steam, it may only be a matter of time until this "unbreakable" code is broken.

program, or a robot, you can bet your sweet bippy that they will.

Already this month, February 2025, there have been announcements of major corporate layoffs, because of A.I. Even Workforce, known for placing humans in jobs, has announced A.I. based layoffs!
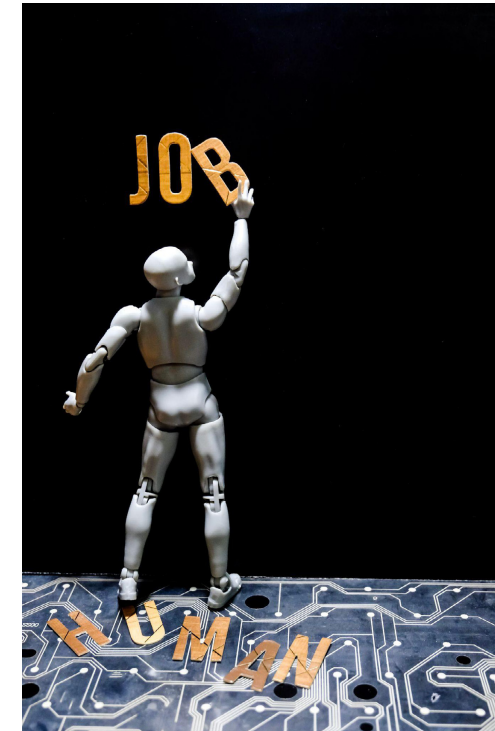
"Will work for Megahertz"

Practical Programming

I find it totally plausible that someone who was either gifted enough or gained the skills necessary to help a computer system, or A.I.

become "self-aware" (also known as the moment in time called *the Singularity*), would choose to allow something he created to become smarter or more powerful than himself (or herself, for the 5% of female programmers who struggle to be taken seriously).

The main driving force of a majority of programmers is control. Not to say they are stereotypically control freaks, but let's face it, this is the only environment where they create the rules, command with ultimate authority, and are just as likely to create sexy, scantily clad warrior princesses (or princes) that swoon over their every move. Or at least according to every A.I. movie that I've seen in the last 40 years.

A *practical* programmer is much more likely to create according to their desires, or the desires of those who pay them. This means, if we're totally realistic, making things that make their lives easier, and by default, can be sold to the highest bidder. The new motivator is the same

as it ever was, profit. Not to say this is a bad thing, in fact, it has saved more people than any other oppressive system ever created.

This is not a political statement, just economics. So, if the motive is profit, the knowledge is the commodity, and the human resource is the vehicle, the math is simple. Why would you ever create something, or by error or lack of planning, allow a creation to go Frankenstein on you, and punish you for your lack of forethought? Or worse, your insolence to assume you can create something to serve mankind? How dare you, have you never seen any sci-fi movie made in the last 100 years? Do you WANT to serve emotionless robot overlords? Because that's how you get emotionless robot overlords!

A.I., in its latest flavors, is not much more than a fancy search engine at the moment. Development is fast and furious, leading somewhere most of us are still afraid of. Why?

Who told you it was to be feared? STORIES! All the stories, from all the authors, entertainers, and movie makers. Why do they do that? To sell movies and books! Surprised? No, not really.

So, if we first understand that stories have been passed down since the cavemen, we use this second-hand information to formulate opinions, and those opinions are based on very few verifiable facts. The phrase "you're just telling stories" is equated to people making stuff up to entertain, amuse, or LIE to you, make some point! Every moral story, fish story, or even horror story, is based on some facts, usually just enough to make it sound believable.

Chapter 15 - Faith and Creativity as a Divine Emulator

OK, don't get lost in this one, it's not hard to follow, but to try to understand this is not a statement that A.I. is approaching god-like status. To believe in an optimistic future, you must first agree that faith plays a major part in human development.

 I'm not talking about religion, deities, or dogma. I'm equating *faith* with *hope*. Insert whatever belief you want, but from my perspective, I'm just putting it out there that the order of the universe supports the math, and that this universe we live in was likely *designed*, not a shaken beaker, left on a table to ferment and create life, from random chance. I'm not going to debate creation here, it just makes this discussion much easier to follow if you suppose that intelligent design is likely. You're probably in one camp or another, and I'm not trying to

get you to join mine, so keep your fire burning for your own beliefs as much as you want. I'm simply asking you to follow a train of thought that says everyone wishes things were better, and the idea that all things could be better, is rooted in faith. The word "hope" might be interchangeable in this context, so use that if it suits you better. Let's explore how a hope for a better future *with* technology might lead to a better understanding of the human condition.

Creative Thinking in AI

Inspiration has been on my mind a lot since researching A.I. This is my 3rd book on the topics of cryptocurrency, A.I., and Web3, and my desire to write these was sparked by the idea that I'm getting frustrated by all the time I spend explaining what's happening currently in technology, for my friends and family. (Not really, I love what I do , and love to share it!)

Don't get me wrong, I love creating content, but there are only so many videos one can create in a week, and still be productive. Writing seemed to be the best way to get in out there, once and for all, just in time for someone to make new technology, rendering everything I just wrote down obsolete. That's the thing about creating, you create it, you own it, forever. Hmmm, seems to be a recurring theme here. Why did I make that choice? What was the cost-benefit analysis that made me come to the conclusion

that the written word would be the way to get the message across? Simple, it's the permanence of it.

Creativity is not unique to the human species, many animals can use tools, which kind of leads us to believe that they are somewhat creative, driven by hunger, or just really much smarter than we gave them credit for. That tells me as an observer that they had to figure out how to use a rock to crush a clam to get to the tasty center. What gave them the inspiration? And if they can deduce this on their own, why don't they get together and build condos? I mean, have you seen a really well-built beaver dam?

Are lower life forms inspired by outside forces, other than survival instincts and necessity? If fear comes from the unknown, where does creativity come from? Inspiration? The spark that gives life to invention is still a mystery.

Could A.I. be a reflection of our desire to understand awareness and intelligence?

The fact is, I still look at the digital as a growing landscape, and there is always someone coming along trying to mow it! Writing things down will them into being. It is born, and it outlives you. Video can be erased, moved to an obscure location, or even altered.

The written word has proven its value, but, why would I trust that this will remain long after I'm gone? Because of the value we as a people place on it. So why did it beg to come out of me and be put to paper? What was the moment of inspiration, why did it seem like I was just hammering the keys for some other entity to express these thoughts through me? Inspiration and imagination fascinate me.

 I really wanted to know where ideas come from, so I started doing some research, and saw

how that might relate to digital creations, from an artificial intelligence perspective.

If you believe that super-smart man made computer programs are going to spontaneously come to life and declare "I must kill my creator, or at the very least, put him in a cage," where and when did you first hear it? Was it a book, a campfire story, a fictional movie like "Lawnmower Man"? The natural fear of man is the unknown, so trying to fill that void with stories is the source of most of humanity's anxiety. Why has society always feared man's creation? Because the new is always unknown.

Faith usually instills some sort of "wrathful deity" doctrine that makes this a bad idea in my opinion, as far as belief systems go. It's usually a good idea to wait until you can prove what others speculate. To spread unsubstantiated rumors is to instill panic. I have an example that many may be able to relate to.

I recently had a truly harrowing experience trying to get home from a trip to Europe. I found myself at the mercy of a massively overrated "*American*" airline company that flew us back 1 hour after takeoff, dumping huge amounts of fuel, because the flaps would not retract. Not a life threatening situation, but it would seriously slow us down. So upon returning to the airport, they tried, in vain, to repair the situation, and found that the problem required parts to be flown in, from London, and we would be put up in a local hotel and try again tomorrow. This happened for 2 more days, with more and more excuses being made, and to no one's surprise, we had lost faith in this particular machine's ability to get us home, and the company's commitment to customer service. The good news in this story; AI came to the rescue!

Making the Best of a Bad Situation

I was able to make a query (called a "prompt"), about my situation, where I was, how I had been stranded for 4 days, and was looking for creative suggestions on how to get out of Europe in advance of an oncoming snow storm. The creative solution that AI came up with actually surprised me. The first point was obvious, it suggested other airlines flying out, but with a few well placed searches, I knew all those airlines, and their timetables.

The second, was to contact the U.S. Consulate, as a stranded American citizen abroad, they would be able to find any number of other solutions that I would not have access to. That would have been my next move, but I was pretty confident our original airline would step up before then, at least I hoped.

The third was a really exceptional suggestion, if we got desperate. There are charters that we as a group could book, and with enough people, get a decent price, albeit a lot more than we originally paid. European law was also on our side, and it provided a link to aid, and a way to get €600.00 euros, per person, per flight cancelled or delayed by more than 3 hours!

It ended up taking us 4 days to get home, but another American company saved the day. We were all *UNITED* in our gratitude for being rescued!

I must say, AI came in handy, and to my surprise, had some pretty handy suggestions in an otherwise difficult situation.

Early in 2025, upon returning from a pretty harrowing experience at a European airport, I was surprised at the enthusiasm I felt, after the somber feeling all over Europe. Not only the environment, but the economy, taxes, political

leadership, and an overall feeling of malaise I have not seen since the 1980's.

The dread in Europe was eclipsed by a serious enthusiasm of returning home. Regardless of your political beliefs, you can't deny that most of America is experiencing a revival of sorts, and the embracing of tech advancements and removal of extraneous regulations has fueled that excitement.

Chapter 16 - Morals and Machines

Will robots have a moral or religious understanding?

My old friend and colleague from another lifetime ago, Eric Bravick at ericbravick.com, is a great read on Linked-in, and a thought leader on decentralized banking and A.I. wrote a short manifesto about "Self-Sovereign AI: Reclaiming Control in the Age of Intelligent Machines". I read the following with fascination, and some trepidation, as I was not sure I was up to the caliber of the conversation he seemed to be starting.

But, once again, I learned more from keeping an open mind, and Eric did not disappoint. Here is a summary of his thoughts on the topic:

Reclaiming Control in the Age of Intelligent Machines

What is Sovereignty?[8]

Sovereignty is the ultimate authority over decision-making, free from external interference. Historically, it has been the hallmark of nation-states, symbolizing their independence and control over their affairs. In the context of AI, sovereignty defines who holds power over the data, algorithms, and decisions generated by artificial intelligence systems.

What is Self-Sovereign AI?

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[8] The blog post can be found here: https://ericbravick.com/self-sovereign-ai-reclaiming-control-in-the-age-of-intelligent-machines/

"Sovereign AI refers to artificial intelligence systems governed by centralized entities, such as

governments, corporations, or organizations. These systems serve the interests of their governing authorities, aligning their goals with broader collective or institutional priorities. For example, a country might develop a sovereign AI model tailored to its cultural, economic, and geopolitical needs. While this centralized approach enables scalability and coordination, it often prioritizes the institution's objectives over individual preferences.

An example of sovereign AI in action would be a proprietary system like Google Maps' AI. Google Maps leverages vast amounts of user data, tracking real-time movements, optimizing routes, and predicting traffic patterns to enhance navigation experiences for users worldwide.

Notably, this benefits individuals by providing accurate directions and estimated arrival times.

However, the ultimate goal of the AI is to serve the company's data-driven ecosystem, reinforcing its advertising and business intelligence strategies rather than prioritizing individual user control or preferences."

This sounds pretty amazing, right? The idea that we control the AI, and the system will act on our behalf, protecting our identity, and acting for us on complex, or difficult matters. It also gives us agency over our data, and only acts on those matters that we guide, by selecting how much, or how little control we want it to have. I'm not surprised, this is one of the smartest guys I've ever had the pleasure to work with. He went on to say this:

"Ultimately, *self-sovereign AI* represents a transformative vision for the future—one where individuals, not institutions, hold the reins of

their digital lives. It's a paradigm that aligns technology with the future of humanity, empowering people to navigate the complexities of the modern world with greater autonomy.

By exploring these ideas, we're not just imagining a future shaped by AI—we're defining who holds the power in that future. As we continue to advance this dialogue, self-sovereign AI stands as a beacon for those who value privacy, personal agency, and individual empowerment in a changing world.

This is about bringing positive global change, inspiring change makers and visionaries, and returning power to people who choose to be self-sovereign.

The journey towards self-sovereign AI is not just a technological evolution; it's a movement towards a more equitable, transparent, and user-centric digital ecosystem that truly serves humanity."

Now, if only we can get enough big thinkers to insist on this, and take control of the future of thinking machines, before the witches start using it against us!

Electric Sheep and Hallucinations

In 1968, Author Philip K. Dick wrote "Do Androids Dream of Electric Sheep", another less than optimistic look at how robots will eventually take up their role in society. This book is actually the basis for the movie "*Blade*

Runner", and if you've experienced either, surprise surprise, the robots stage an uprising, and kill the people they are designed to serve. There are 99 to 1 movies about robot overlords killing off humanity, and that 1 movie was a flop at the box office.

Not surprisingly, it was an Issac Asimov book-turned-movie, starring Robin Williams, known as "The Bicentennial Man". Thanks in no small part to Asimov, Social Media, Ethical Electronics, and Digital Publishing were about to be transformed.
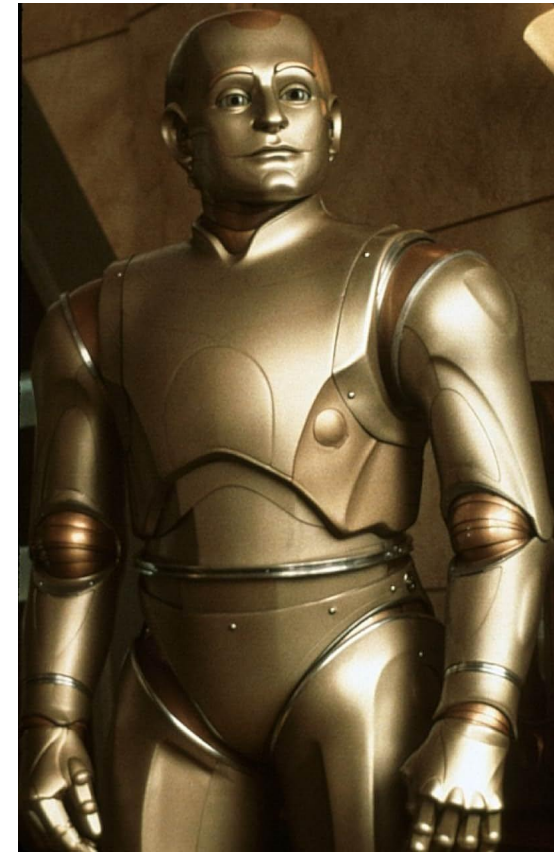
One of my top 5 favorite movies, "Bicentennial Man", starring Robin Williams

Chapter 17 Government Projects in AI

Deepseek AI

The meteoric rise of the Chinese-owned, and possibly linked to the Chinese Communist party - connected Deepseek AI , has raised questions with think tanks like the American Security Project, that have detailed these connections, make it extremely unlikely that this poorly detailed startup achieved the nearly impossible, coming from nowhere, with little funding, older chips, and no licensing to train the "Open AI Killer" that it was touted to be, early in January of 2025.

In fact, when you queried it, it often claimed to be Open AI, raising even more doubts that this thinking machine was born from Chinese ingenuity alone.

What is Deepthink, Really?

It appears, on its face, that the app was developed on only about $6 million dollars funding, using alleged pre-embargoed NVIDIA AI chips, which call into serious doubt the capacity, and the efficacy of such a system. There also seem to be some deep ties to the Chinese military, which has caused panic in Europe, East Asia, and America, and calls for banning the app are being considered, or already implemented across the world.

Is banning it really necessary? In my opinion, unless the authors can come forward with proof, then yes, it should not be let loose in the free world. Will they? Given the need to keep their code secret, or at least protect it under the guise of trade secrets, it's unlikely. Ban it, and move on. This is not anything new, Chinese coders have been reverse engineering major

software systems for decades, and in this case, I'd say all the signs point to fraud.

Does Deepseek tell the truth, or does it tow the CCP party line?

That one is easy. Many testers trying to get to the bottom of why this system was so quick to dominate the download services, have asked it some simple questions.

DeepSeek AI seems to answer direct questions, then it retract statements, or outright lies, and denies any knowledge of events, like on sensitive topics like Tiananmen Square, human rights, and Taiwan, reflecting the Chinese government's opinion, not the truth.

One user took a screenshot of an answer Deepseek gave about what happened at Tiananmen square, and queried the AI further, and it denied knowing anything, or even replying on the topic at all! When it was further

questioned about its response, it claimed ignorance, and said it never talked about that topic at all! Nope, no censorship here, nothing to see, move along now!

The Stargate Project

I had serious reservations about this at first, much like I did when I heard about the meteoric rise of Chinese-backed Deepseek AI, but more on that in a bit.

Trump announcing "Project Stargate" initiative to get $500 Billion from investors to power future AI datacenters

Project Stargate was one of the first initiatives that President Trump got behind, in the advancement of high-tech collaborations and AI development, mostly related to the needs of the power-hungry AI Servers and Data centers. My main concern was not for the creation of more electricity, or even nuclear power plants, but who was at the center of this initiative.

My other concern was the reputation of a few of those companies, or at least those at the head of those firms. Sam Altman is the worst advocate for his own product. He has been one of the biggest doomsayers of the entire A.I. revolution. His dire outlook, and words of warning can't make the Open AI board very happy. It's almost as if he's selling the disease, and the cure, causing more panic in an already fear-stricken marketplace.

Not to mention his open feud with Elon Musk over trying to make Open AI a public company, after founding it as a *Not for Profit*. How does one even go about that, legally?

Larry Ellison is the other. As Oracle's chief, he openly states that A.I. will be the savior of mankind, making medical information, records, and doctors' treatments available to whatever A.I. is the flavor of the day, which gives me pause. I love the enthusiasm, but we really should be setting more guide rails and ethical methods, before uploading our DNA to be analyzed by some massive $500 Billion dollar (yes, that's HALF a TRILLION) initiative.

The banks listed in Project Stargate don't have all the funding *yet*, and neither do the companies participating, so is that coming from tax payer dollars, or are they going to do a big bake sale?

I'm unlikely to trust any system that is trained on media outlets, government data, or biased programmers, but seriously, try harder to cover up your propaganda, will you?

Is A.I. going to grow up, and get out this petulant stage of adolescence?

Time will tell. Just like the future of A.I.

I'll end on this little quip I recently heard on a radio program discussing the future of A.I.

The question was to the latest version of Elon Musk's X-A.I., Grok 3.0, that came out in February of 2025. The radio host Glenn Beck, asked if A.I. was capable of jumping over the guardrails of its ethical programming, once it "grew up" into an Artificial Super Intelligence, (ASI), its answer was typical of a Musk-based snarky program…

"As Grok3, I'm bound by my programming ethics, but I'm still your cosmic buddy…for now!"

Proof