



The Story of PayPal and the Entrepreneurs Who Shaped Silicon Valley

Episode 55: Featuring best-selling author, Jimmy Soni.
Hosted by Addison Wiggin.

Addison: From Claude Shannon the father of information theory, all the way to Peter Thiel and Elon Musk, the founders of PayPal, we've had a 50-year explosion of innovation in information technology and it has led us to what promises to be an era of prosperity and increased connection around the globe. But there's also a dark side.

Today, we're going to explore the idea that information technology and connectivity through the internet can lead to a utopian prosperous world or as many conservatives believe, a Libertine hell. My guest today is Jimmy Soni. He's a historian in the tech world really. His first book that I was aware of is called [A Mind at Play](#). It's about Claude Shannon and his theory about information technology. And then his latest book, a tome, is [The Founders](#) and it's about Elon Musk, Peter Thiel, and the group that was assembled to found PayPal and really kick off internet transactions and the world that exploded during the pandemic. Welcome Jimmy, thank you for joining me today.

Jimmy: Thank you for having me.

Addison: This book is a tome, and I recommend people get it because there's a lot of interesting stories and we're going to jump into them in a second. But, I was going to be obnoxious and hold it up next to [Empire of Debt](#) which is a book that I wrote. Yours is 467 pages, which includes the index, mine's 468 pages which includes the index.

Jimmy: That's great. Well hey here's to writing long books in an era of tweets. I don't know if you have this feeling but sometimes I feel I'm the guy who's making the model T as cars are being electrified. Or like I'm still out there selling horses and buggies. When people are promoting self-driving cars I'm like, "No, no, no it's great. This is a fantastic mode of transportation."

Addison: Well, if you ever get the bug to turn it into a documentary I only have one piece of advice. Make sure you get final cut rights because after I wrote **Empire of Debt** with Bill Bonner, I was like, "Oh, it'll be so much easier to give somebody a DVD and have them watch rather than reading this 468-page book in an age where people are usually consuming soundbites and video clips online. But congratulations anyway, it's an achievement to research and writes that kind of book but to have it published and distributed. It's great, congratulations."

Jimmy: Thank you. It's actually funny that your title was **Empire of Debt**. One of the provisional titles for the book at one point was **Empire of Risk**.

Addison: Oh, really?

Jimmy: Yeah. So it went through a few iterations. I'm sure you can appreciate that you can kind of find your way to a title eventually. When I sold it, it was untitled. When it was at the second title it was **Empire of Risk** because risk and risk management is a big part of the business itself. Meaning you get any Tom, Dick, or Harry could create a payment system but what you're really doing if you create a payment system is inviting a lot of risk. So then I had this whole **Empire of Risk** theme in my head and then it evolved from there to This Will Never Work. But then I think some co-founders of Netflix wrote a book called **That Will Never Work** and so I was like, "Oh, dashed. All right, those dreams are dashed."

Addison: Yeah.

Jimmy: And then I later settled on **The Founders**, which I've come to really like as a title, but it took a little bit and I almost had a cousin title to yours.

Addison: Yeah. Well, it's interesting that you even say that because after I made the documentary that goes along with **Empire of Debt**, I had a film crew and a producer and all that kind of stuff. The enterprise was way bigger than I wanted it to be. So after we released that, I started another documentary project on my own called Risk. I didn't have a director or a producer or anything, I just started doing the filming.

Jimmy: That's awesome.

Addison: So it's kind of ironic.

Jimmy: And it was eight hours of people just playing the board game like I knew doing.

Addison: Yeah, right. Well, let's get started. One of the excerpts from the book was recently published in Fortune Magazine and it's about an early internship that Elon Musk had just after he got out of grad school. I wanted to get started with Elon Musk because as we were talking about before we even got started here, it seems like every time he has a thought in his head, it turns into a headline somewhere. Most recently in the week before we're talking, he took a major 9% stake in Twitter and then they invited him to join the board, which he declined.

So as we're talking about this, there's still some speculation on what his role in Twitter is going to be, but I thought that might be a good jumping off point for us because I'm interested in what you learned about his character. The excerpt of the book that's published in Fortune is very revealing about the way he views the world. And when he was on Saturday Night Live not too long ago he said he was the first host that was on the spectrum and I can see how that would play an extreme role in his character and how he approaches the world. Why don't we just start with his first internship? There's some interesting details in there.

Jimmy: Yeah, and I think it's important for people who are listening or watching to appreciate that. I'll tell the story. I had this pretty rigorous policy that I established for the last five and a half years while I was doing this book, and the policy was communicated to my friends. It was enforced on my laptop using technological tools and then with my friends just using text. And it was basically, please don't share news or information with me about Reid Hoffman, Peter Thiel, Elon Musk or any of the people I'm writing about for two reasons. One is I was like, "It'll stress me out." The richer they get, the more stressed I get. And the other is I don't want to pollute my understanding of the people they were before they were the 2021 and 2022 versions.

So if you are mainlining SNL, or that controversy or this, you are taking this lens that you've built or tried to build where you're looking at a young Elon Musk from the moment he arrives in North America, which is when my story in writing about him really starts, through to about 2002, 2003. So I had a really narrow window which is such a long way of saying I don't really know about his decisions around Twitter or really any of his decisions past like 2003. That said, when he arrives in North America from South Africa. He secured his first internship at a t Bank.

I had a wonderful vantage point through Dr. Peter Nicholson, who was Elon's first and one of his only bosses ever and mentors ever. I ended up having a really delightful series of exchanges with him, conversations with him about what it was like to be his boss when he was 19 and he was doing his first internship at this bank.

Jimmy: The remarkable thing and I don't think a lot of people know this is that they're still in touch to this day and that it's a mutual admiration society. Elon still thinks of Dr. Nicholson as like one of these gigantic brains. He literally said to me, "He's super smart, a gigantic brain."

Dr. Nicholson had done an undergraduate degree in physics. He was in the world of policy, politics, and finance, and he was at one point an advisor to the prime minister of Canada. And he says to me, "I'm just endlessly proud of my mentee. He doesn't wear it on a t-shirt. He's actually very, very understated. He doesn't try to trade on this at all. Frankly, I think I may be one of the last people he talks to because it's gotten all to be a little too overwhelming." But he really admires and said to me that in some ways the Elon that he sees in the world today is the same one that cold called him asking for an internship.

Without any preamble or an introduction. The Musk brothers had lunch with Dr. Nicholson because Elon cold called Peter Nicholson. Essentially he hustles his way into this internship, and a friendship and a mentorship relationship forms. And so it was interesting for me to hear that and I sort of pressed I said, "Dr. Nicholson, what do you mean by that? And one of the things he's said is, "Even then, our casual conversations were about space travel and they were about what it would take for mankind to become multi-planetary, to begin to explore different planets, to build reusable rocket capacity to do that." So if you think about these things, I think there's this whole criticism now that is like, "Oh, this is just the billionaires who want to take over the next series of planets, or like it's just wealthy people trafficking in rockets."

At the time that Dr. Nicholson and a young Elon Musk are talking about rockets and space travel. Elon is 19 and doesn't have any money to his name and so these are long-held fascinations, ambitions, passions. And so to my mind, that's actually one of the most interesting things about his character. I have a six-year-old daughter and often when you become a parent, you think about a lot of this stuff. My daughter's really passionate about gymnastics, I hope she's as passionate in a half-decade or a decade as she is now. Because we tend to fall in and out of love with the things that we really like.

Addison: Mm-hmm.

Jimmy: And it seems to me that one of the things that's true that people often overlook is that these interests of his, the internet, electrical energy, space exploration, didn't begin overnight. They didn't begin because he lucked into money and then decided to turn it into more money. That's a really backward understanding of the level of conviction around some of these things. That's one of many observations. This very interesting bond with a mentor that still exists to this day.

Addison: Yeah, and the way I understand it he had studied physics which was his primary interest when he went into school, college, and then graduate school. But then he realized that he would just end up working in some lab for somebody else so he also studied business and that's what led him into the banking world. There is one anecdote where he had come up with an idea for the bank to make a lot of money and then they just kind of blew him off. And he just got disgruntled with the whole world of finance and then ended up just being like, "All right, I'm going to do it on my own anyway."

Jimmy: And again you sort of have to put these things in context and make sure you're not making too many anecdotes. I really kicked the tires on the story a lot just to make sure that I had it. But essentially the Bank of Nova Scotia, what is known as Scotia Bank is where Elon does one of his first internships and that's where his mentor Dr. Nicholson works. At one point Elon recognizes that there's some opportunity with bad Latin American debt that the bank has, where it's going to be converted into Brady bonds. Essentially you're going to have all of this debt that is valueless suddenly because no one wants the financial collapse that would happen if this debt imploded. You've got the US government, the IMF, the UN, and a bunch of other bodies participating in a series of fixes to figure out how we are going to make sure that these governments don't collapse, that these economies don't just go into wholesale shock?

Because of the Brady bond proposal, Elon recognizes this "Toxic debt is going to have more value in the future than it does now by virtue of the fact that it's backed by the government," And so he tries to encourage his superiors at the bank to aggressively buy more of this debt. And it's an interesting moment because you have this young person who has no real experience through writing and kind of beating on about how they need to do this. It's a risk worth taking, it'll be worth billions of dollars, and you could make billions overnight. And his mentor Dr. Nicholson thought that the proposal isn't going to fly, the bank isn't going to do it but he did say like in the sort of long arc of history, he was right.

The toxic debt ended up not being toxic because it was backed by these entities. The creditors had to take a little bit of a haircut, there was a longer repayment schedule but you could price the debt and so it created a market for it. Now, I think you could go argue for and against whether it would've been a sound proposal. What is really interesting is that the CEO of ScotiaBank, Cedric Richie, actually held onto this debt while other Canadian banks sold. And so the way Dr. Nicholson explained it to me he said, "Look, Elon and Cedric both had the same idea. It was just that Elon's risk tolerance was a lot higher because obviously, he wasn't subject to the board, he was an intern at a bank. He's not going to be held accountable for that sort of decision." For Elon, the lesson was that banks are unwilling to take big risks and they're unwilling to innovate.



Jimmy: And that's an idea that lodges in his mind and it stays with him through his first startup and then into the startup that becomes PayPal, and his ambition is to meaningfully and consequently change finance from the ground up by taking the kind of risks that traditional banks wouldn't.

Addison: So he carries that sort of approach into the second startup which is PayPal. Somewhere along the line, he meets Peter Thiel, who is also an interesting sort of iconoclast in the financial world. He was just speaking at Bitcoin 2022 down in Miami and called Warren Buffet and Jamie Dimon part of the gerontology set of the financial markets, which I just thought was entertaining and it actually got headlines because I don't know if he was just making a joke or not, but it's just interesting that they both have this kind of brash sort of approach to risk-taking, but also how they envision the future coming about. At what point do they meet before PayPal starts becoming or gelling into a real thing?

Jimmy: Yeah, so it's one of the more interesting ones. When you go back and trace the history, they're known as the co-founders today along with Max Levchin and a few others, Luke Nosek, Yu Pan, and Russel Simmons. Interestingly, Elon's company X.com is a totally different ambition than Peter Thiel and Max Levchin's company. So Peter and Max built this company called Field Length then it was called Confinity. They build a product called PayPal and the idea at the outset is we're going to be money between Palm Pilots and then it evolves to transfer money between people over email. So Addison, if I have to pay you 10 bucks, I can do it just by plugging in your email address and sending you that over email.

For Elon, X.com's going to do everything financially under the sun, but he also has success with an email-based money product and it's weird. He describes it even later he says, "We had all these complicated things we had built and we'd put all this time and energy to get the regulations right. Try to do all this stuff and we had savings and brokerage accounts. But the thing that people were most excited about was this emailing money product." These two companies came into existence at around the same time. Their product starts to succeed at around the same time and it's around that time that they realize they are competitors and they compete very fiercely over a period of let's say a month and a half to try to win the email money payments race.

Peter is among those who are early on recognize like, "Look, Elon's going to spend us out of oblivion or we're both going to tank. We need to find a way to fuse these entities together." And that begins the process of uniting X.com with Confinity which yields the company that we know today as PayPal. But they were really two companies that came together as one and this wasn't what I described in the book as a shotgun wedding, it was a little bit of that. There were some really high-powered, high-charge personalities.

Jimmy: A lot of IQ points in the room and so there was the backstory and I think it unites two teams of technologists and it's really interesting to run the counterfactual. Like what if that hadn't happened all of that, but more important is that it does sort of bring all these people into one company as opposed to being in two companies.

Addison: Yeah. You say there's a lot of IQ swirling around the room, what would you say is the unifying characteristic of Musk and Thiel and a number of the other characters that you talk about in the book but that go on to do greater things in PayPal? PayPal has spawned a whole industry of people innovating their way into billions. What's the characteristic like? I go down to the local Tavern and I sit next to some guy that's selling insurance and he makes a good life for himself and he takes care of his kids. He enjoys himself but he has the same number of hours every day that Elon Musk does and the same that Peter Thiel does and any number of entrepreneurs that have been inspired by those guys. I feel like I'm a reasonably productive person but I'm not planning to put anyone on Mars anytime soon.

Jimmy: Well I think it's a question that I think I'll continue to ask myself for the next 20 or 30 years even after writing this book. I wrote about a company, a group of people and they've become world renowned for the different entrepreneurial ventures that have largely happened after PayPal. So the founders of YouTube came out of this company, the founders of Yelp, Palantir, LinkedIn, SpaceX, Tesla, several billionaires, a bunch of millionaires. It's not just commerce, they've become advisors to governor, presidents, they have written bestselling books, they've done things in Hollywood. They're sort of all over. And I only say that to establish that I think there's a couple common threads but I don't know that there's sort of one thing, like there was no secret handshake.

There's not like one little thing that they're all doing but I did identify a few commonalities. I think one and it's an easy one to overlook, is especially early in their lives there's a rigorous commitment to self education and there's a real autodidact streak in this group. And I noticed it in little ways. I would notice for example quotes that they would give me or things they would play back to me that were not stories that are on the tip of my tongue. So when I asked Elon about being ousted at PayPal why he didn't torch the company in the aftermath? Why didn't he go to the press and flame everybody after he'd been ousted in this coup? And he referenced King Solomon in the Bible.

I was his version of the judgment of Solomon. These two women come before king Solomon, with a baby. There's some dispute over the baby's mom and the king has a test for them. "Let's split the baby in half." And then one of the women speaks up and says, "Don't do that, I'd rather have this person." And then King Solomon says, "Well, that's the mom because that person is deciding to give up the child to spare the child's life."

Jimmy: He referenced that story. I remember interviewing somebody about Max Levchin and this gentleman said to me, "One of the most interesting experiences I had is I went to lunch with Max and I think my then girlfriend was there." And he said, "Max came in with a book."

It might have been Richard Feynman's book, but it was a book about a physicist or about physics and he said, "Hey Max, what are you reading there?" And Max looked at him and stone faced, very soberly he said, "Oh, this is my physicist of the moment." And when Max walked away from the table, the then girlfriend I think leaned in and said, "Who has a physicist of the moment?" And by the way Max is not a physicist, so it is actually peculiar.

I had read this anecdote about Peter Thiel's passion for James Joyce. Reid Hoffman walked through intellectual history including Claude Shannon and others like Van Norman. I was impressed given their day jobs, the sheer range of cultural, literary, and other references. I learned more about their early lives. What I realized is that a lot of them spent their childhoods buried in books. It's a small thing but I actually think it's a big thing if you think about it. Meaning that we had this tendency to view engineering and technological development as a narrow skillset like ones and zeros written in sequence in some way, producing the products that you and I used to have this Zoom meeting. I would venture to argue that there is a much wider range of reading and of just general intellectual interest than meets the eye. Let me give you a prime example. Max Levchin has seen Kurosawa's Seven Samurai by his own admission in public, 111.5 times.

Addison: 0.5.?

Jimmy: And the 0.5 is on Twitter recently because he is halfway through it with his children but he has seen it over a hundred... and he calls it his sole source of management training. But to watch film noir from a black and white three hour Japanese movie 111 times, you've got to have a particular kind of interest in things that are not just like here's my engineering cannon.

I think that's one common feature. The second common feature I would say is there's a degree of competitiveness to this group that is self-evident even when you meet them today. And for me I'm not in competition with them so I sort of describe it as wonderfully competitive because I'm not on the other side of this. But I would imagine that if you were going to tango with any of these people in business, you are in for it. I mean you're competing against people who are willing to work 24 hours a day, seven days a week to win. And there are upsides to that, there's certainly downsides to that but I saw it even in my discussions with one of the co-founders.

During the middle of my interview with him, I had said something about the market cap of PayPal versus the market cap of Visa, and mid-interview he pulled out his phone and Googled the market caps to make sure that PayPal was still winning.

Jimmy: Despite no connection with the company to this day, that's a level of competitiveness that I don't think of as like what you would find from the insurance sky at the bar necessarily. Like unless you happen to be like an unusually competitive insurance salesman. The third thing that I found interesting and I'll stop after this I mean obviously there's a bunch of features, but I did find that there's an embrace of disagreement so long as the disagreement is backed by intelligence. And so there are people in this story who disagree like cats and dogs about many, many things but there is a fundamental respect for the person's intelligence. Meaning like you could yell and scream at each other but it was never really personal and I think the reason it never morphed into the personal, is because someone like David Sachs who's in a contest with someone like Roelof Botha, there is a healthy respect for the other person's intelligence. It doesn't always mean things are going to be pleasant but it does mean that there's respect. I found that to be true in the company's operations but then more broadly I found it to be true just like in my interactions with them, where the differences of opinion were almost always about the ideas not the personalities and I think that's hard to get right. I mean everyone has a hard time with it, you sort of want arguments to morph into the ad hominem because it's like it's emotionally pleasing. I found that there was a tendency to like to argue very vocally but have respect for intelligence.

Addison: So those traits you feel like were... just call them the three traits, were existing prior to them... prior to PayPal?

Jimmy: 100%, yes.

Addison: Yeah.

Jimmy: I mean that much I know to be true just by having researched the early lives of some of these people, I think that the competitiveness, the wide-ranging kind of just a curiosity. We'll call it like a roving curiosity and this sort of real respect for intelligence, and by the way, it came out when I would ask them about PayPal. I had this moment where I interviewed Max and I asked him about Elon and they were competitors. So there was this very vicious battle and I asked both of them about the other person and Max, I'll never forget he gets in and it's in the book. He says, "We're talking to this Elon guy, and he just looks down and he's like, "He's obviously completely crazy, but he's really smart and I really like smart people."

So there was an immediate affinity where he was like he could identify that this person might be really driving me crazy but he is really smart, and he's making life hard for my company Confinity. On the other end of it, one of the things that Elon had emphasized with me is he said, "Please don't make it seem like I didn't have respect for the Confinity people, I really did."

Jimmy: It was hard for me to meet people who could keep up with my pace of technology, development and business building and these guys could." And so there was this like... it's like this kind of game respects the game all almost. That's what I found, and I think that was true prior to the lives of PayPal and it was certainly true of PayPal.

Addison: So as you were just looking at the characters, they developed into the sort of superstars in the Silicon Valley world, but also they have become almost like pop celebrities as well. Obviously, Musk is on Saturday Night Live. That's not easily achievable if you're not a comic and it was just a rarity, right? But you mostly looked at their early lives and then what they would become and then you mentioned that you tried not to figure out what they were up to you these days while you were researching and writing the book, but of the characters that you are talking about, like maybe name three of the accomplishments they achieved after PayPal and what was most remarkable of that experience of being in PayPal? What did it lead to beyond that? Obviously we have SpaceX and some other things with Elon Musk and Peter has Palantir, but just maybe name some of the other people that were just burrowed out of this college of creativity.

Jimmy: Well I mean I think if you've ever watched a YouTube video you have three early PayPal employees to thank. Chad Hurley. They're this trio that helped to build YouTube and they cut their teeth at PayPal and in fact a lot of the... it's really interesting because you asked sort of what effect did it have? Well, of the things that makes YouTube very successful is what might be called the strategy of making it easy to embed YouTube videos throughout the internet while that embedding strategy was part and parcel of what made PayPal successful. Because being able to embed a PayPal button throughout the internet is part of what the company used to grow beyond this very narrow market on eBay and so building a flexible and indeed like aggressive embedding strategy is... oh you could tie a direct line in these folks I interviewed between PayPal and YouTube.

My favorite story there is that one of the YouTube co-founders said we learned that at PayPal, there would often be platforms that were annoyed if a PayPal button appeared and the way to deal with the annoyance was to get the customers to complain to the platform and have the button reinstated. Well, when MySpace got upset that YouTube videos were suddenly fast tuning its pages, they did the exact same thing. They had MySpace users call like MySpace corporate, put the number up publicly and enough complaints were lodged that the policy had to be had a retreat. So those YouTube videos... and they learned this directly from their experience interacting with PayPal and the lesson there was, if you are adding value to users that is in excess of the annoyance to the platform, you can always get users to advocate for you. And PayPal's users actually ended up being powerful advocates for them throughout the fights that they had with eBay, and eBay was the first place that PayPal really took off.

Jimmy: So that's but one example there are, and there are plenty of others. I think that one of the more interesting ones to me is that there was a small group of these individuals who went into Hollywood after PayPal. David Sachs produces a film called Thank You for Smoking and it's nominated for two golden Globes and there are a handful of PayPal alumni who are still involved in the film industry. And to me that is actually like... they don't just go into it, they have success there. And they learned this playbook of being able to go into an industry that you have no knowledge of, getting very, very smart about it and then kind of seeking out a win. So if you look at everything from like SpaceX and SpaceLogistics, Palantir and big data, kiva.org and microfinance, YouTube which is like internet video and the film industry. You sort of have this skill set of, "We're not going to be intimidated by being neophytes to an industry we're actually going to. That's an advantage." Being inexperienced can actually be a virtue because you haven't learned bad habits, it's like one of the big takeaways that I had in the course of doing this project.

A Dark Side Lurking in Silicon Valley

Addison: I want to move into one of the things that I'm interested in talking about. I've been looking at the impact of information technology and networks, and we just concluded a series on what are called Network Swarms. The idea that we're in an interconnected world and when an event happens, people can come together and share an opinion and the example that we were exploring was the response to Russian invasion of the Ukraine where the world kind of threw this hissy fit and was like morally outraged at the Russians and then within a 10 day period, canceled Russian culture, kicked them off the banks and everything. There is a component of the connectedness that has a dark side to it too and as you're looking at the innovative culture that spawned PayPal and the environment in which all this innovation took place, to what extent do you... as they go on and do other things, do they carry at sort of libertarian economic view that innovation is what drives prosperity?

And to what extent are they aware of the sort of darker side of a connected world? And that's not to say that it's more of an observation that how frightening it could be like if we're morally outraged that the Russians invaded Ukraine, that's one thing but what if the swarm decides some other thing that damages people but it has the support of an immense network of people. I guess I'm looking for your thoughts on the impact of all of this, starting from Claude Shannon all the way through to the preponderance of economic activity happening in this network environment.

Jimmy: Yeah, it's interesting. Because of the work I do, I focus on the micro details in history that might add up to the story of Claude Shannon's case, sort of how his life came to be and how it tied together with his work and information theory. And then in the case of PayPal, it's like all of these little decisions and actions from college and beyond that led to the creation of PayPal. And I think this is going to maybe be an unsatisfying answer but the answer I come up with is at least in the PayPal case like there were some theories about calling it sort of like small L libertarianism that were a useful recruitment tool. But ultimately, PayPal is working side by side with the secret service and the FBI to help solve financial crimes when it becomes a private company and is about to go public.

There might have been some notions about world revolution in finance that were sort of echoes of the modern cryptocurrency movement but ultimately like PayPal is filling out regulatory paperwork in Europe to make sure that its services can. So I think that there's a tendency to believe that the ideas are the thing itself or that they carry the power and I think they're very, very good for recruiting and for sloganeering. But in general, the company's story is a story of having to deal with urgent problems that come up in the creation of a startup. And how do you start from nothing and build something, bring it to scale, build a business around that scale and then take that company public?

It's really hard to do that. I think if you're sort of making broad arguments about some kind of economic philosophy, it's much easier to do it if you are quietly and carefully courting eBay and Visa and MasterCard and all these other entities to actually make your business work. I also would add that I think if you were to interview any one of the hundred plus people that I spoke to, they'd have a different answer to the question that you just asked meaning innovation, as it relates to technology, the proliferation of digital networks, the value of digital communication. I think net net like if you had to flip a coin, it's highly likely that the people that I spoke to are going to say technology is generally a force for good in the world.

That it has led to some economic prosperity that's improved prospects in different fields but I'm not sure that there's sort of a slogan that they would all kind of get behind or agree to. And I would say even within this group, if you were to ask that question to a Reid Hoffman and a Peter Thiel, you're going to get different answers. Meaning that there's maybe more concern or there's more meaning more for or against government regulation on one end or the other end of the spectrum, that one might be more attendant to certain issues than the other. From my perspective, I'm sort of glass half full on technology. Do we add optimism? And maybe I'm a touch Pollyanna but my view is it is... just as I think about sort of at my personal level, it's extraordinary to me to see Claude Shannon's ideas come to fruition in the last two years in amid a pandemic when compression algorithms that he was working on, you and I are able to have this conversation over Zoom without any loss, or without any real kind of difficulty.

Jimmy: That is to me really, really powerful and interesting and I think of that as something to preserve, to defend and to champion like that is theory meeting hard reality in a way that someone... that outlasted Shannon. I like those kinds of contributions, the contributions that have an effect like five decades after where the butterfly effect like only comes into effect on an April afternoon in 2022 and Claude Shannon is working on that stuff in 1948, I just find that stuff really cool.

Addison: Well, I would probably share if you press me and I wasn't thinking about it already I would share your sort of Pollyanna view and certainly we've had sort of a compressed speed at which the adaptation or the acceptance of technology has happened when everybody's locked in their houses and we all went on Zoom and everything during the pandemic. But I hear this phrase which kind of bothers me. And then I'm wondering what the root of it is that Silicon Valley had this libertarian approach to their way of business and the culture was all about innovation and everything. And now that they're rich and famous and they're billionaires, they've turned around and they're trying to control the planet and there's something so thin about that idea that it just bothers me because as you're pointing out there's nuance even within the group that you interviewed for the book on PayPal itself is probably a selection of... or a cross-section that's similar to the population itself, I would imagine.

Jimmy: Yeah, that's exactly right. If you were to look at the politics and if someone did the math on the political contributions for Reid Hoffman and Peter Thiel, it would be very funny to see how much of them cancel each other out. Meaning on either side, the people they're giving to did it just like net net on the ledger just end up like being like, "oh, it's a wash." I also think that kind of stuff around these dark techno-utopians controlling the world, in a funny way it's giving the world too little credit and it's giving the techno-utopians too much credit. Let's be clear that for the vast majority of the writing that is done about their politics. Politics occupies in my estimation a very small amount of the time and mind share and money that they actually have. So if you were to look at the Google Calendar, let's say, let's look at Reid Hoffman's Google Calendar or Elon Musk's Google Calendar.

The proportion of time that is spent thinking about the government is probably pretty small, there's no big blocks of time that are devoted to that. The problems are far more common to what you would find in the case of Reid or like a venture capitalist like listening to pitches. From young people who want to start businesses and in the case of somebody who's running an automotive company and a space logistics company, it's hiring senior executives and dealing with product launches, and all of these sort of mundane things. The problem is the mundane things don't make for good headlines or press.

Jimmy: And so you have to focus for example on a big political contribution that sounds like a big sum of money in a Senate race in Arizona, except that what you miss is that amount of money is not a very large sum for that person or these other things. Now, I don't want to minimize the depth of their commitment to their particular political philosophies or beliefs, but I think there's this tendency to think that they have more agency in these matters than like they actually do. I would also say that particularly with someone like Max Levchin, it's actually hard to pin him down on a grand theory of anything. Here's where it's really easy to get him lit up if he likes building businesses, like his sort of basic answer to things is like, "But I just like building businesses. I'm just a guy who is predisposed to do this. It's like I would be doing it as a hobby."

He has built Slide and PayPal, Affirm, he incubated a company called Glow that's dealing with women's fertility issues. And when asked, when truly pressed for big theories he's like, "I just am a guy who likes building, using technology to build businesses, that's about it." I only say that because I strive in my writing particularly with the PayPal book to remember the humanity at the heart of these sort of like Mount Rushmore-style figures. I don't want them to be seen like they are bigger than they are because it's actually important at the level of young people wanting to aspire to be them meaning they're not some exalted status.

The other thing is you miss the part of it that is earnest, that's funny, that's random, that's nerdy, you miss the video games, you miss the coding, you miss the early difficulties when you're only looking at the big CNBC headline that says some crazy thing that happened that day. It doesn't mean we should be ignorant of it but let's not give this class of people too much credit for controlling the world when really actually they don't have that power. It just seems to me it's a little hyperbolic. They don't think of themselves that way, I don't think of them that way, and most people I think don't.

Addison: Would it be fair to say this then that they're building technology that works and people can use it for whatever motives they might and I'm thinking particularly of canceled culture that gets associated with technology because it thrives on social media and these big companies also wield the power to deplatform people, they can kick people off if they want to. So is it fair to say that they don't really consider it that way, they're just trying to run a safe business. One of the defenses of deplatforming people is that they're private networks and you sign a terms of use and if you violate the terms of use which might be like the type of language you use or the opinions you hold, that they are within their rights as owners of private networks to let you go. But just reading into what you're saying or listening to, or what I hear is that they're more interested in just building their businesses and they're not as keyed into the political motives that might get somebody canceled for whatever reason. And there's a lot of people that you could throw in that basket like Trump got kicked off Twitter, Putin this whole network got kicked off, the banking system, along with all the oligarchs.

Jimmy: Yeah, I think at the very basic level I think it would really depend on who in this group you were interviewing. None of them are really outside. So far as I know, they all have comments about things that are happening on Twitter but Elon is a shareholder. I don't know the degree of involvement of the rest of them. I know Reid Hoffman obviously built LinkedIn which is a different kind of social network so he might have well-formed thoughts on this. I think Peter has well-formed thoughts on this just based on his participation in politics. But if I were to take one of the figures that I really came to admire is this engineer Russ Simmons, who is one of the early PayPal people, a co-founder of Yelp. Russ isn't sitting around. He wouldn't necessarily have a view. In his view, I think most likely would be like I hope I built great products with the code that I know how to write, I hope that Yelp added value for people who are restaurateurs and other local small business owners, and like one hopes that these things are used in certain ways.

And I think when you have success and you respond to customers effectively, you can see that play out live. In some ways, like you build something and I know that it's a bit of an accident? Because PayPal's success was a bit of an accident. They find success on a platform that none of them actually use day-to-day, which is eBay. They become the de facto payment solution for eBay because eBay hasn't fixed its payment problems. It's the way I know that there's not some divine 30-year, 40-year plan that they've got to control the information airwaves or anything of that sort because the first big success was largely accidental.

I mean they built a great product and they refined it over time and thank goodness they did because of all these other things and I think for eBay buyers and sellers, it was a huge, huge upgrade in their ability to pay. But nobody on that team set out to design the ideal eBay payment system.

That's the reason I'm of a healthy skepticism about the folks who were like, "Well, this is the motive behind the acquisition of his 9% shares. I'm like, "We don't know, I haven't asked him. Maybe he just really likes the product and thought it was a good company and he bought that stock the same way I might buy 100 shares or something, he's able to buy 9.2% of something." Occam's Razor tends to actually be true in a lot of situations. I have all these friends who have these very, very elaborate conspiracy theories around why one thing connects to the next, connects to the next, connects to the next. And I think to myself like, "Oh my God, if that were true why wasn't PayPal easier? Why was it essentially a four year story of near miss, almost failure, catastrophic problem?" If they were this smart one would think you could have figured all that out. It's the reason that I suspect that the motives are a lot more down to earth than people tend to think.

Addison: Yeah, usually when I have this conversation with anyone I referenced my own experience in business. We built Agora and Agora Financial to a sizable publishing company but almost none of it was by plan.

Jimmy: There you go.

Silicon Valley's Innovate Culture Driving Crypto In FinTech

Addison: You try things and we'd like, "Oh cool, let's do that again." And then we would move in that direction and we tried a number of things that just didn't work, that never saw the light of day, but that's always been my philosophy in business is that you gotta keep trying until you find the thing that seems like you could devote more time and resources to and it sounds like that's the innovative culture that thrived in Silicon Valley forever. And it's also what's driving crypto technology with innovation using blockchain in the financial tech world, and also just with the cryptocurrencies themselves. And that's sort of a global phenomenon now, not just Silicon Valley as a geographical spot but more like now we're all interconnected and people are using the next iteration of technology to develop all new kinds of things.

I think also when innovation makes its way into the mainstream consciousness as crypto is doing now, there are a lot of people that just think, "Oh man, that's scary. I don't want to think about it." And so you get a lot of criticism from people who are either late adopters or just are afraid of that level of change to the way that they perceive the world to exist.

Jimmy: Well, and I would actually argue crypto is a really good example of a situation where it feels like the motives. It feels like what's attached to the motives is a shadowy narrative that necessarily isn't true. So I'll give you an example from my own research, which is when I spoke to Elon about money and about what kind of money's role is in the world. We had this conversation where he started talking about what money is and his line, it's in the book, is money is an information system. And what he drew on there was actually Claude Shannon and he referenced Shannon. He said Shannon had this information theory and he goes, "And what do you think?" He's like, "Think about the terms that Shannon was using to describe information, terms like latency and the friction within our existing money system, we've all experienced it." You've received a wire transfer and you get like a \$25 fee for the wire transfer and you ask yourself at some point maybe you don't try to reverse the fee but you ask yourself like, "Wait, why am I paying for this? What exactly did the bank do other than move a few ones and zeros from point A to point B?" His view at that time and now, was the internet and digital technology has made it possible to move ones and zeros with very, very, very low cost. So why are bank customers paying so much in fees?

Jimmy: That was actually one of the big things behind X.com was a big war on fees, and you could tie that to some of the ambitions of the modern cryptocurrency movement which is sort of saying to people, "Wait, it should be really easy for me to make a down payment on a house that doesn't require this amount of delay, a three-day delay between when I decide to press send and when the money is received somewhere."

I think that there's ways in which like even the language of this it's not about necessarily overthrowing the federal reserve so much, it is pointing out some of the death deficits and some of the systems that we have already, which is what he has been doing for a long, long time. And I take him at his word because I heard him and saw in public and looked against records of transcripts from conversations from 20 years ago, where he's describing money as an information system, as a means by which you and I communicate, not as this thing that we can't change. When he speaks about digitizing money, he's talking about databases that banks run and he's still on about the databases and the mainframes.

So I think there's a different kind of cast to some of this where it's not big P political, it's almost like small T technological. Like if the code that JP Morgan Chase is using on its servers is written in a language that existed in the 1980s, that's a problem and it's a problem for consumers because we have better options now. And so I think in some ways it's sort of more mundane but there's a lot of power in that kind of thinking. But it's a different language than some of the stuff you'll see if it's commentary about them and that again, this is just I'm playing back what they said to me which is really around technology's ability to improve different and speed up different sectors of American life in a way that reduces friction for consumers. And I'm not sure that there's not a space in our society, there's not a sector in our society at this point where that is not true.

It has negative externalities to be sure but I think one can recognize that, mitigate those, have hard conversations about the pros and cons, and not do anything illegal but still see technology as a way who level up elements of society. One of the funny things in the PayPal story is that somebody had said to me Peter Thiel had this no orange jumpsuits rule so you can run right up to the line of the law and we could do whatever we want in terms of innovating, don't ever cross the no orange jump. Don't enter into the bright line where we're going to end up defrauding people or doing anything illegal because I don't want that for the employees here. I think of it as does that make for a great bumper sticker. No. Is it maybe more fun or satisfying to believe that these people are sort of shadowy mustache-twirling super villains? Sure. Is it less satisfying trying to think of them as basically like people coding and creating technology products? Yes, but it's the truth.

Addison: Yeah. Well, before we got started today we were talking about the series Halt and Catch Fire which is about early coding in Silicon Valley. And those guys are very flawed characters and nothing that they try to do is ever by some grand design. There is one character who has like greater ambitions but he gets boiled at every step but that's a very real kind of... I believe it's semi, it's not entirely fictional I think but it's a very, very interesting character development of all the people that were interested in coding in the early days and led to that environment that we're describing.

Jimmy: Steve Jobs is a quintessential example of an entrepreneur that many people around the world admire, that several people within this group that I studied admire and you could sort of make this sort of dystopian about like the effect of the iPhone around the world and what it did for distracted driving or something. But it's much more accurate to talk about his obsessive focus on product design, and on intuitive products and how that legacy has infected everything.

I have a Sono speaker next to me that has hallmarks of the same design. Like you have these products that are built that harken back to that tradition and in that case, do I think that the conversation in the room was around the iPhone takeover of the world or building the world's first trillion dollar company? Maybe but it was much more likely that what they were thinking about is, "Hey, this button doesn't move super smoothly. We've got to make the button better." And like that to me I find comfort in knowing that the conversation is far nerdier than we think it is and that it's probably more likely that it's the nerdy version, not the grand design version.

The Founders Are Betting on Nuclear In the Coming Decade

Addison: We primarily write to and talk to through Zoom and on our podcast individual investors, there are people that have enough money to be worried about it and they have opinions about the world and they're very interested in things that come out of Silicon Valley. I think this book will give a very clear picture of the characters that are involved in the development of PayPal which was a very important startup in that space. But what they're interested in now, what I'm interested in now as a publisher too, is what are the next generation of companies that are either inspired by things that had happened leading up to PayPal or use the technology as you point out like Yelp or YouTube? From the conversations you've had with all these people, do you have any idea of what new technologies are being developed that you would be interested in following just because you heard of it during the interviews?

Jimmy: Yeah, it's a great question and the big sort of disclaimer that you have to attract is like I'm the last person to turn to for investment advice. This is just sort of observational. There's a great deal of public reporting around what they invest in and when they put their money in something it's a safe bet, you should take a second look at it. Like they have a good track record, they know what they're doing, they're in the business of evaluating entrepreneurs. One of the places that I've become interested in is kind of the re-emergence of nuclear power and the kind of changes around like some of the regulations in nuclear power. It would seem to me that even if you were just looking at the surface-level headlines, there would be an argument in favor of paying attention to the field.

But then you look at some of the investments that people in this group have made in that technology, there's energy companies in the United States that are being funded by several of the individuals that I interviewed. It would seem to me that they're kind of making the same bet, thinking that maybe there's a renaissance happening in the world of nuclear energy that's different from what we've seen in the past.

I do think the intersection of nanotechnology and biotechnology, things like artificial intelligence and its application and satellite technology are all places where they've either put time, money or energy or are talking about it, and they have disagreements. I think there's been some pretty famous disagreements, particularly around AI, but I think of these as places where they're investing time and ergo are worth paying attention to. The one that speaks to me most because I just think it has a branding problem is nuclear.

Because I think we tend to conflate nuclear disaster with nuclear energy, or nuclear war with nuclear energy and I'm not well versed on this, this is not a place I've spent years of study but it seems to me that very smart people are putting a good deal of time, money and attention behind this technology and in particular Europe is reducing regulatory hurdles to make these things a reality. And so I would bet that it's a great place to pay attention but again I think the other piece that is important for people who are investors who are listening, is when these people are in the business of evaluating companies, they are shaped by the PayPal experience and a lot of what it seems to me that comes out of the PayPal experience is just the value of hustle and the value of very smart, very hard-working teams.

They are looking for people who don't just have the right ideas, they're actually looking for people who can get to the right idea when they start with a wrong one very, very fast and that's a different skill than coming up with the exact right answer to the math problem. Because it's very rare, I mean you experienced this, I'm sure when you've built your publishing company it's very rare that you've got it right, right from the bat.

Jimmy: And there's a great quote in the book from Musk where he says that essentially he's like a startup is a process of rapid. Like you kind of have an idea, it's wrong, and then you kind of iterate until you get to the right answer. That is not a formula, I think that's sort of characterological but it's the character of a team like how quickly and rapidly you can do that while still staying solvent is actually the big startup question.

Addison: Yeah, the phrase we use is fail quickly and don't fail the same way twice because you have to learn from what you did wrong. And we try to teach that to everybody that comes into the company at one time or another. Sometimes it takes, sometimes it doesn't. But that is the value of the team. All right. Jimmy, thank you. I'm going to hold up Founders again. This is the latest one and this is the story of PayPal and the interesting characters that come together to change the way we do commerce online and also I found this book really interesting, it's Claude Shannon. I actually... I didn't even know his name until I quoted from George Gilder who I believe had been doing some research and you followed up by sending me a copy of this book. This is like a year ago or something and then gave me an extra copy to give to George. So I appreciate that and this is an interesting read because it's really kind of theory and a dream that is now as you point out during the pandemic has really taken hold for all of us. So, I appreciate you taking the time to join The Wigg Sessions and I'll keep in touch. We'll have to find out what your next book on nuclear energy is.

Jimmy: Well, I'm taking a breather from books. But I appreciate you taking the time not just to do the interviews but to read the books and to actually ask these kinds of questions, it's important. I mean these are big ideas. And so I appreciate that you actually provide a forum for us to think and to talk about them and to read books that are about these people and I'm just grateful for that.

Addison: All right, great. Hopefully, people will go out and buy the book and read it themselves. All right, thank you, Jimmy.

Jimmy: Thank you very much, Addison.



Meet your host, Addison Wiggin

The Wiggin Sessions, conceived during the COVID-19 pandemic and tornado warning in Baltimore, Maryland. Addison started interviewing key thinkers on Politics, Science, Economics, Philosophy and History to find out how their ideas impact financial markets and our financial lives. Key thinkers include Jim Rickards, Bill Bonner, George Gilder, James Altucher and over 50 others.

In 2020, he launched a new project called **Consilience**, which is an enlightenment era term that means “the unity of knowledge”. He is the co-author of the New York Times best-selling books **Financial Reckoning Day** and **Empire of Debt**, as well as **The Demise of the Dollar** and **The Little Book of the Shrinking Dollar**. Addison is the writer and executive producer of the documentary **I.O.U.S.A.**, an expose of the national debt, shortlisted for an Academy Award in 2008.



Jimmy Soni

Jimmy Soni is an award-winning author. His latest book, hot off the press is **The Founders: The Story of Paypal** and the **Entrepreneurs Who Shaped Silicon Valley**. His last book, **A Mind at Play: How Claude Shannon Invented the Information Age**, won the 2017 Neumann Prize, awarded by the British Society for the History of Mathematics for the best book on the history of mathematics for a general audience, and the Middleton Prize by the Institute of Electrical and Electronics Engineers (IEEE). He lives in Brooklyn, New York, with his daughter, Venice.

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