TECHONOMY NYC

Bits, Banks, and Better Money

Speakers:

Jon Stein, Founder & CEO, Betterment

Minerva Tantoco, Former CTO, City of New York

Moderator:

Mark Bonchek, Chief Epiphany Officer, Shift Thinking

(Transcription by RA Fisher Ink)

Kirkpatrick: Please come on up, Mark. Mark has the great title of Chief Epiphany Officer of Shift Thinking, and his two panelists are both good friends of Techonomy, Minerva Tantoco, who used to be the Chief Technology Officer of the City of New York and now is doing some pretty cool entrepreneurial stuff, and Jon Stein, the CEO of Betterment. So Mark, go for it.

Bonchek: Thank you. So thanks to my panel here. This is an interesting topic because in some sense we're in the context of talking about business and responsibility, and this is the financial services panel, which may be at the opposite end of the spectrum. But I think what you'll find is that there's hope. There's hope for responsibility in financial services. We're also going to tie together a few themes of this afternoon, looking at AI and regulation and entrepreneurship. So I am very excited to have both of you. Thank you.

Tantoco: Thanks for having us.

Bonchek: So I have to say, Minerva has—if you saw her name badge, it says "stealth fintech," which is not the new brand. So she was the chief technology officer of the State of New York, but now has a stealth fintech that we'll see if we can extract a little bit out of her.

And Jonn, Betterment is one of the remarkable stories of disruption in fintech, right? So founded in—you founded in what, 2008?

Stein: That's right.

Bonchek: And now I think I read you're the first independent investment manager to cross $10 billion in assets, is that right?

Stein: That's right.

Bonchek: So pretty amazing.

Stein: Yeah, $13.5 billion today for 350,000 customers. How many of you have heard of Betterment? I'm curious. Okay. So I don't have to do a lot about what we are.

Bonchek: Well, do a little bit. So what is—for everybody else, just give the quick thumbnail.

Stein: So Betterment is an online financial advisor. We take all the things that a great financial advisor would do for you and we make them smarter, faster, cheaper, better. And for instance, we'll lower your taxes by optimizing a lot of things like tax-loss harvesting and coordinating things among accounts. We'll help you create a really personalized financial plan for you, for each of your goals, for retirement, for college, and we'll help you save the right amount in the right accounts and so on. We've been growing fast. In that first year, in 2010 we added only $10 million dollars in the whole year, and it seemed like a lot of money. It was amazing that we had that many people come and trust us in that first year. And today $10 million dollars is kind of a slow day for deposits, right? So things have come a long way.

Bonchek: So what was the aha that had you say, "Okay, I'm going to do this." And for as much as we can, Minerva, I want to find out for you, at least what problem are you out to solve, even if we don't know the solution yet.

Stein: So my background was in consulting to the financial services industry. I worked for banks and brokers here in New York and all around the world, some of the biggest names out there. And in that work, I did product development for them. In fact, those are the projects that I gravitated toward, I enjoyed most when I was building new products with banks. And we would build a new mortgage product or a new deposit product and we'd do all this internal transfer pricing analysis and figure out the default rates and so on, and in a six-month project, we might never talk to a customer.

And after doing that a few times and noticing the pattern, I asked one of the partners and the partner said to me, "Well, Jon, there's some industries that make money off of people and there's some industries that make money off of money. We make money off of money, and so we sort of are like this internally focused optimization shop." And to me, that just didn't work and I wanted a financial service built around the customer. I wanted it built around me, my friends, my family, and as I went around and talked to people, about what are the problems that you see in financial services, I found that many had the same one that I was facing, which is what should I do with my money?

I opened seven different brokerage accounts and I find that each of them wanted to optimize around what was right for the broker or right for that service and none of them was thinking about me. None was built around the customer. And so we sought to build the most customer-centric financial service, ever. And it became Betterment. It became the answer to the question, what should I do with my money?

Bonchek: Great. All right, Minerva, when did the lightbulb go on for you?

Tantoco: Well, you know, actually, before I was CTO of the City of New York, I spent over a decade in banking as CTO of places like Merrill Lynch and UBS, and I was in charge of innovation and digital transformation for these very large well-established banks. I think it's pretty well known that banking is broken. I also knew that what the fintechs were doing, the ones that I was working with were really innovating around the edges of it but they weren't really innovating truly digital, digitally transforming banking. And I'm a huge believer that automation and security will actually democratize financial services for people. You'll have better access to better advice for a lot less money if you can democratize it using automation, right, Jon?

And so the aha moment for me is, banking is broken, but I think I know how to fix it. And so a little over a year ago, you know, cofounded this stealth startup, and in the public filing, we have applied for a banking charter. I think one of the best ways to disrupt banking is to become a bank yourself, so hopefully in some time we'll be able to talk more about it.

Bonchek: Okay. I think it's interesting because you can think about a very different kind of panel that we could be doing, also on the theme of responsibility, which would be looking at unbanked, underbanked, community lending, all of those kinds of things, and here it's kind of a different angle on the idea of purpose and impact, which is to be customer-led, to have a different kind of relationship that's more reciprocal, and it's not necessarily about the traditional kind of social impact measures and CSR direction and more of just following the customer and creating customer value. So it's interesting to think about that here.

Just in the interest of time, I'd love to talk a little bit about, you both have, I found, a really interesting perspective on regulation. And having worked a little bit in financial services it's kind of like everyone is always complaining about the regulators. And both of you have a slightly different view. Not that you don't, I'm sure, complain about regulators too. But you guys said that kind of regulation's actually a good thing. So I'd love to get your thoughts on that.

Stein: Absolutely. I'll start.

Tantoco: Why don't you start, Jon?

Stein: Thank you. For me, I always knew we'd have to be a regulated entity. Actually, in the very early days of Betterment, I thought maybe there's a way just to create this new service for people and not be regulated. But, no, the rules are really well-written to prevent anyone from ever doing that. So—

[LAUGHTER]

And that's a good thing, right? You know, there's a lot of thought and there's hundreds of years of history of financial regulation in this country and it's all intended to protect consumers and it's all well-intentioned.

Now, some people complain that it prevents innovation, and I hear that, but I also think it takes time to write good regulation and you have to observe what's going on. And we work very closely with all of the regulators. We work very closely with the SEC. We were a big champion of the DOL fiduciary rule. We worked very closely with them on that. We've worked closely with FINRA. We have great relationships with these regulators. And all of them, to a person, are pro-innovation. They all want to see new products. They all want more consumer-centric products.

No one is saying the way things are is perfect and we should just maintain the status quo. And they're looking for opportunities to innovate. And I think what you are seeing right now is, in the SEC for instance, with their new proposals around a new fiduciary standard, they've taken up what was good about the DOL rule, they've seen the change in the industry, that we have led, and they see now an opportunity to bring more best interest-type advice to everyone. And that to me is an example of industry leading regulation and regulation taking the opportunity, taking advantage of the opportunity that innovators provide to update innovation.

Bonchek: Minerva?

Tantoco: Yeah, echoing that, I mean, my short time in government and my decade in banking, you're right, regulation is there to protect, at the end of the day, to protect the average person, in the same way that regulations keep a factory from putting a giant smokestack in the middle of Manhattan and spewing smoke on everyone. There's a social impact to that and that's really important. But in addition to that, I think there's a huge opportunity for technology to actually help compliance. And so an area I'm particularly interested in is, you know, there are many regulations, very complicated. Couldn't you build a machine that helps you be more compliant, right? You know, I spoke recently on the topic, of making regulatory tax sexy again. I was like, again? When was it ever sexy?

[LAUGHTER]

But okay, now that I'm in it, I guess it's sexy. But you know, and that's a big component of it. And also if you could use technology to track more things, you can really help even the regulators read all of the submissions that they have to read. And so in addition to the core function of regulation is being to protect people, technology can actually help make things more safe for folks. The final thing I would say is, and I will say openly, I am not a robot—

Bonchek: Can you check this box please to prove it?

Tantoco: But, you know, the main thing is that—where it gets tricky is you can't throw an algorithm in jail. At least not yet. And so ultimately, what the regulations do is to help define who's accountable and for what they're accountable, in case they do something bad. And so to me, that combination of having augmented intelligence and the human who will be the person responsible for what that machine does I think is kind of a more comfortable place from a regulatory perspective.

Bonchek: On that, let's talk about that a little bit. Jon, just speaking before, you made a real distinction between algorithm and AI, which I think often gets kind of blurred together. And maybe with an algorithm, if it's written out, you can at least know who wrote that, but my understanding of an AI is it's a little bit of a black box by design. So how do—and Minerva, you had one of the first companies in AI, and so how do you—and it may be stealth, but I can't imagine that you're not going to have AI in there somewhere. So how are you thinking about IA? How should be people be thinking about it? What do people get right and wrong about it?

Tantoco: Well, for me, AI was always a set of techniques, and I think in the '80s when I founded my first company—this is now my third—it was about replacing or perhaps—you know, replacing humans. Artificial intelligence implies that. Now it's much more about intelligent assistance, which is trawling through the massive amounts of data that there are that humans can't do, as we saw from the earlier speakers. But still, there's judgement involved. And I think what we were doing in our first company was still very much about having a human interpreter of all of that computation was really important for us in the beginning. And if you then don't know how the algorithm works, that's where things get worrying. Because if it does do something that is incorrect, then you don't know who is responsible actually.

Stein: I think, just building on something that Minerva said earlier, that reg tech is sexy, I think that's actually where a lot of the interesting things are happening in AI right now. Talking even to some of the bigger companies about where they're applying technology, it often is in the back office where these things are seeing their first really big scale applications. And for us, the same is true. Some of where we have applied AI is in processing of checks coming in. We can intelligently route those and match them to customers. It's a really interesting application of it that we've grown internally and we would like to use more to advise customers. But a lot of that is still fairly algorithmic today because there are so many different cases and there's a lot of judgement involved in it. So we're still gathering data, right? With 350,000 customers, I think we're still trying to get enough data to use AI for those type of applications. The way that it's being used is to take those things that used to take ten hours and make them take two hours. And we can kind of continue to do that, and to me that is a really exciting part of it, because that efficiency drives cost savings for everyone involved.

Tantoco: That's right.

Bonchek: I want to turn a little bit to the industry structure. So both of you have kind of disruptive companies, or will have, that are playing initially in a niche, but where is this going to end up? Are we going to see the big established companies disappear? Is this going to be a Borders kind of situation or is this just new niches that will end up being alongside of it? You know, they're kind of the dinosaurs. Are we going to see the end of the dinosaurs or the mammals and the dinosaurs kind of coexisting? Where is this going to come out?

Stein: I think no one is sure. I was at a Fidelity conference the last couple of days in Arizona and the example they use, not too dissimilar to the Borders example, but the folks from Fidelity were talking about are we the department store, right? You know, is our industry of investment advisors like the department store and we're going away and sort of online rivals like Amazon will take share from us. Are we seeing the early signs of that? And that's one view.

My own view is that we're not going to put Schwab or Fidelity or Vanguard out of business, but there will be many winners here and all of these firms are going to have to adopt a lot of technology to compete in the future. So Walmart, as the example, has had to adopt a lot of new technology and different practices in order to keep up and compete. And I think all of these firms that want to stay relevant are having to invest very heavily in technology. That's why you see Goldman is hiring so many developers, it's why JPMorgan is doing the same. Those firms that are sort of leading get it. I think most firms still are unaware of just how fast the change is coming and are underinvesting and will be left behind to an extent.

Tantoco: That's right. It's innovate or die. So for those who don't sort of place a bet on the transformation coming will no longer exist. But the good news is that technology will create entirely new businesses and new niches for new players to provide services, that we didn't know we—who knew that we needed our detergent delivered to our door in two hours by pressing a button, right? So there are new kinds of services that will come out. I don't think it's—and there are some very innovative companies that are doing it.

I think the biggest barrier I see with the larger banks is that they have 80 percent of their tech budget on legacy systems, which are almost impossible to upgrade, change. They're expensive to run and you can't just add innovation to that. So for those who are truly seeing the future are going to rip those out and replace them. And the others will have to figure out what to do when that mainframe blows up.

Stein: By the way, I will just add that, while I'm so excited about the future of technology and see the need for these companies to invest, I also don't think people are going away from this industry, right? I think of financial services a little bit like maybe people think about exercise, right? You can get a gym membership and you can do everything on your own, but a lot of people, after they do that, they're not doing the right thing and so they decide to get a personal trainer, right? And people are still going to want to get a personal trainer even though you could now have an app that does everything for you and recommends exactly how many calories you ought to lose today and how many steps. People are still getting personal trainers. So there's still going to be a lot of humans involved in financial services, because they just provide services that even strong AI is going to struggle to provide that human touch.

Bonchek: I'm curious about how the industry is going to kind of adapt. So a lot of my work, I find that the barriers to entry are more mental models than business models. And in the past, the history for financial services has been about assets, so you just acquire your way to scale and to keep up. And we heard earlier, a point of view that if it's about data and building the algorithms, you can't just acquire your way into that necessarily. Do you agree with that and do you think that that mental model of acquiring a fast follower strategy, is that going to be effective for the bigger banks?

Stein: There will be a lot of consolidation in this space. I think we've already seen a lot of bigger firms buy—FutureAdvisor was bought years ago. LearnVest was bought in our industry. Simple was picked up. That will continue. And I think everyone is going to have to acquire some kind of technology to keep pace. I don't know if it's enough. Because it's this thing that has to be at the core, in my view, of the company, to be customer-centric and to take all that learning and apply it back to improving the service for the customer. So it's more than an acquisition. You almost have to use the acquisition to reinvent the company around it.

Tantoco: Yeah, I think it is going to be really hard to retrofit if you build on a business line model versus a customer-centric model. And so you have to start with a customer-centric data model to actually achieve what you want. And it takes a lot of massaging to get, you know, even a single view of the customer at some of these banks with all of the data silos all over the place. So it's a problem I know intimately and too well. [LAUGHS] And in part, that's why the decision to really start from scratch and say it starts at the customer and you build the data around that is really the way to go.

Bonchek: And then briefly, our last question then, kind of bringing it back to the theme around responsibility, so do you think that a customer-driven—where you're looking at not making money off the customer, as you said, but maybe with the customer, is that inherently a more responsible model?

Tantoco: Absolutely. I think, to my earlier comment about democratizing financial services and making more capital available, and especially in the digital age, right, where the tech economy is really the driver of so many things, if you can democratize that and make that more available to more women, to more people of color, you're actually making a huge difference. I think the one caveat I would say is, especially in terms of AI, but algorithms generally, is that you want to be mindful about these, because these pattern-seeking algorithms can also end up reinforcing biases, right? And so you have to be careful not to say, "Oh, that pattern, oh, don't lend to that zip code." Well, that's kind of, you know, probably true, but is that a pattern you want to replicate? So I would say always approach these levels of automation with some amount of care around whether you're actually eliminating or reinforcing biases in the patterns themselves.

Stein: I'll just add to that quickly, I think a lot of the good that we're doing has nothing to do with technology. In a sense, we're taking an old-fashioned view of what's right for the customer. And there has always been someone out there doing what's right for the customer, right? A financial advisor has always had that duty to you as a client to do the right thing for you. That relationship just hadn't been available to most people because most people in America are sold financial products by brokers, mutual fund companies, banks, etcetera. They don't have real fiduciary best interest advisors. And we're just using technology to make that old-fashioned concept accessible to everyone.