## **Podcast with Brett King**

## \*Note that transcripts may sometimes contain errors and that transcript timing notations do not match the posted podcast

Jo Ann Barefoot:	00:00	I predict that today's show is going to be a fan favorite because
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my guest is the one and only Brett King. Welcome.

Brett King: 00:09 Hey, Jo Ann.

Jo Ann Barefoot: 00:09 You are the author of Bank 4.0, which we're going to talk about,

and you are the executive chairman of Moven.

Brett King: 00:16 Correct.

Jo Ann Barefoot: 00:16 And you are the host of the extraordinarily popular Fintech

radio show Breaking Banks.

Brett King: 00:23 Yeah, we've been around for five and a half years now, the radio

show.

Jo Ann Barefoot: 00:26 That's fantastic.

Brett King: 00:29 Yeah, coming on six years, so that's ...

Jo Ann Barefoot: 00:31 And I've had you as a guest here before and I've had the great

fun of being on your show. And I asked you to sit down with me today, we're in New York, to talk about the new book. And I had the pleasure of co-authoring the regulatory chapter with you, which I hope everyone will read. And I'd just like to jump in and start maybe with you had quite a long gap between Bank 3.0 and Bank 4.0, your series of books. Well, I guess you were

figuring things out. So tell us about that.

Brett King: 01:08 I didn't stop writing, of course, in between. I had Breaking

Banks, the book, and I had Augmented, Life in the Smart Lane, which to date is my best selling book. Augmented, of course, was a ... I went full futurist on that, I didn't talk about banking. Well, I had a chapter on banking but it wasn't dedicated to Fintech and banking. And ended up on the shelves of President Xi's bookshelf, which was pretty amazing. So that went really well. It was top 10 non-fiction in a number of countries. So it

wasn't like I wasn't writing.

I didn't know what Bank 4.0 was gonna be. When I finished Bank 3.0, there was sort of a clear path around Fintech and incumbent innovation efforts. I was toying with what is gonna be Bank 4.0, but I really didn't know and it wasn't really until I saw the Chinese Fintech ecosystem emerge. And started to see the leaps and bounds they were making. And I realized there was something quite different about how China was approaching Fintech and how emerging markets in general are approaching it. And it's quite timely, talking about this, that M-Pesa, one of the cases I use in the book, has just announced a really innovative credit solution. They're in Kenya, which again proves the thesis behind Bank 4.0. So it was just I didn't know what Bank 4.0 was gonna be. I had to wait for it to sort of emerge.

Jo Ann Barefoot: 02:45

So the first chapter of the new book is about first principles. So I would summarize the thesis of Bank 4.0, that you're talking about the advantage, the difference that people have for basically, if they start from scratch instead of trying to retrofit onto the old banking system. So talk about that and talk more about the Chinese model.

Brett King: 03:13

As you know, being a futurist, you have to be a good student of history as well. So what you look for, historical precedence to support your thesis. So when we look at technology's impact, we can track how technology adoption's going. So that's one strength. So we can see technology adoption, we can look at the rate of adoption of things like the smartphone or mobile payments or whatever, and we can track where that's going. So we can know when it's going to become mainstream or when those things are gonna be disruptive.

We can also anticipate new technology to emerge, like the voice-based smart assistant that we're seeing in the smart speaker. And then in the future, probably spatial computing with augmented reality glasses and things like that. So we can anticipate those things. But the interesting factor is human behavior. How humans respond to those changes. So when you look historically, and you look at the most disruptive innovations from a human behavior perspective and from a technology innovation perspective that sort of changed industries, you realize that all of the biggest disruptions were basically this first principles design philosophy.

And when you hear the likes of Elon Musk or Steve Jobs talk about that, it's this complete rethink of that industry or sector you're in. So it's not taking the business that you currently have and iterating on it. It's starting from scratch. As Musk describes it, it's breaking the problem down to its constitute physics and rebuilding it from the ground up. So the examples I use in the book, the automobile, they didn't [inaudible 00:05:07], they didn't build a faster horse, they re-thought transportation. The iPhone, which didn't take the Motorola flip or the Nokia banana phone or the Blackberry and try to iterate on that, there's a rethink of that device. SpaceX, with the way they've approached rocket science. And all of those are good examples of people who completely change the rules of their industry by doing these first principles innovation.

So the obviously question, then, was is there evidence of first principles design happening in financial services? And when I started looking at China, and what happened in Kenya and M-Pesa and generally around the world, I realized there was ample evidence for this thesis. Now, unlike say the iPhone, or SpaceX, it's not one product that's been affected. Well SpaceX is probably a good analogy, it's the entire industry is gonna have to rethink the economics of the business, the way we reach out to customers, the products we have in the business, all of that is changing as a result of this thinking.

O6:24 The book, by the way, everyone definitely needs to read it and

it's a great read. It includes a tremendous amount of storytelling that it's really ... I loved your Wernher von Braun's story. I had

never read that one before.

Brett King: 06:41 I'm glad you say that, because that's, I think that's what I really

worked on as a writer. It's interesting, because I've only been writing books for ten years now. But of course I'd written before that. I wrote my first novel when I was 27 or so, but I never published it. I feel like that mix of the storytelling, the strong

research, has sort of become my signature. And I enjoy it.

Jo Ann Barefoot: 07:13 Yeah, well it makes it fun and compelling to read. And includes,

in terms of China, a very, very fascinating story of Jack Ma, the founder of Alibaba Financial, and where this all came from. You had summarized that. I know our listeners hear us talking all the time about how mobile technology is opening up financial

Jo Ann Barefoot:

services to everyone, but the Chinese model, describe in a little more detail how it has evolved.

Brett King: 07:51

We are obviously in the process here of switching people off of plastic and cash towards mobile payments ecosystems. We have Apple Pay, Samsung Pay, Google Pay, and so forth. And then systems like Square and others. But in China, of course, what happened was that shift has been a lot more pronounced. We've seen in the space of about four years the sudden demonetization of most of the urban centers in China as a result of mobile payments. Last year, the figures aren't out yet, but I estimate it will be about \$22 trillion in mobile payments through China's ecosystem last year. Why that's significant is that it'll be more than the global aggregate total of card payments, for the world. So mobile payments are officially the most common form of consumer payments day-to-day as a result of China. But that happened because of these two networks, Tencent WeChat, a social media network in China, and the dominant one. And Alibaba's eCommerce platform.

And the use case that both those guys started with, which was really brilliant, was the red packet behavior at Chinese New Year. So if you're familiar with Chinese New Year, what happens is it's sort of like their Christmas period for gift giving here. But they give packets, red packets, red envelopes with cash in them. So if you valued something that your employees at work did, or your colleagues at work, or your doorman of your building, whatever, you would give them a red packet to say thanks for the work they've done in the previous year. So Tencent WeChat was the first, in 2014, to launch this digital red packet. Because of the network effect of the social network WeChat, and the fact that this was a very common behavior that people, to physically get a red packet and get it to someone and put cash in it, this was a use-case that was very simple.

Now once people had sent money, and we're talking about hundreds of millions of red packets that first year, and once they saw that that worked flawlessly across this network, then there's the obviously question of well, why can't we use the phone to pay? At that point, it was QR codes that were underwriting that. But that meant you didn't have to get a point-of-sale terminal. You didn't have to go to a bank and apply for a debit card. As long as you had a WeChat app, you could both pay and accept payments as a merchant.

The ability for that network to scale, with network effect, on top of already a very popular social network was phenomenal. And so the growth in mobile payments. And Alibaba and AliPay, of course, because of their place in the Chinese ecosystem grew just as rapidly and slightly faster. So you have these two networks competing and really rapidly changing behavior. But none of that is analogous to what we do in the West in terms of payments except for the utility of the core payment. There's no card systems involved, there's no merchant payment networks involved like we have here with Visa. You know, card scanners, Visa, MasterCard, Amex, and so forth. There's no point-of-sale terminals, there's no plastic, there's no signature or pin required. It's all quite very different from the ground-up, grassroots ecosystem. But phenomenally successful.

So then when I was in China a couple of years ago meeting with Minsheng Bank, the number five bank in China. And I was meeting the CEO and I was talking to him about payments and he said, "What do we do about VAT?" So I started to talk about hey, you can add value to payments and so forth and trying to compete. He waved his hand at me to indicate I should stop and then he said, "No, no, you don't understand my question. The banks in China have lost payments to the tech companies. What do we do to stop them from taking credit?" He said. And that, to me, was the epiphany that actually, if you took the core utility of a bank, the ability to store money safely, the ability to move money safely, and the ability to access credit, we were seeing China resurface that utility through this technology layer in a way that wasn't adaptive of the bank branch model, it was something new.

And yet in the west, we're trying to put a credit card in a mobile phone. And when we have Apple Pay, you even look at Apple Pay, we've got a physical representation of the card, or a graphical representation of a physical card, which is completely unnecessary. We're iterating on the model. China has leapfrogged that. And as of 11th of November last year on Single's Day, 60% of the transactions that were done, \$31 billion of sales done on this one day, 60% of them were done with biometric identification, facial recognition. And so they're so far ahead of us now. How long is it going to take the US to get facial recognition for mobile payments? I mean, will we have it in five, ten years? This is a question. So China's so far ahead of the curve on this but it's because of this first principles rethink.

Jo Ann Barefoot: 14:03 So we have listeners all over the world, for the ones in the West, and in the US, what do you say to two things? One question is, it's easy to do first principles if you're starting with a green field, and it's harder to take everything apart, as you said, and put it back together. And then I think the other thing that we've struggled with is this is fascinating but, how is it gonna change us? Is this actually going to come here? And if so, what would be that path? And what should providers be looking at? 14:44 I'll start with the last question first. I mean if you look at AliPay **Brett King:** and Tencent WeChat Pay, they're in over a hundred countries already. Mostly catering to Chinese tourists who are traveling, but increasingly others starting to enroll in that ecosystem. Anyone that visits China has to be on their system, because you can't pay using cash or plastic anymore. So there's some material changes there. Jo Ann Barefoot: 15:14 We had one guest on the show who talked about being in Shanghai, I think, and encountering someone begging on the street, was taking mobile pay. 15:25 In terms of how it will affect the rest of us, I think voice is Brett King: probably going to accelerate some of the changes in the West, primarily because you'll have this agent, a voice-based agent that will do a lot of transacting for you. And so the whole CVV, chip and pin model is not going to survive that. I don't think the 16-digit pan has any value in this ecosystem anymore. Once I can identify you and know where you're gonna pay from, I should be able to enact that payment. Voice will be the big shift as we shift off eCommerce to voice-based commerce. We'll end up figuring out we have to go the same way. 16:21 Jo Ann Barefoot: Let Alexa get in the lead so I can just ask her to-**Brett King:** 16:23 Although Google's investing, yeah, so-

Yeah, Google [crosstalk 00:16:29]

Washington on Friday.

Hey Alexa, order me a pizza, or Alexa, book me a flight to

Yes. Or reorder my printer ink from Amazon.

16:25

16:29

16:40

Jo Ann Barefoot:

Jo Ann Barefoot:

Brett King:

Brett King: 16:44

If you think about how technology generally is changing, the user interface has got simpler over time. And so when I learned to code via computers back in the '80s, early '80s, I learned on punch card system, and then went to PCs, the first portable computers, previously microcomputers, Commodore V20, and then after that, the IBM PC. And yet you required a high degree of technical competency just to operate a computer, not ... let alone programming. And yet today, you've got kids speaking into Alexa speakers, you've got two-year-olds picking up iPads and being proficient in moments because the complexity of that interaction has reduced as the computers have got more powerful.

So when you apply that analogy to banking, the technology removes the friction. We don't have a need for a first-century artifact, the signature, to do banking anymore. It doesn't make any sense since it's not secure, it's not unique, it can be easily copied. So the ecosystem of financial services based on it has to change in the digital environment. If your bank still requires a signature on piece of paper, too long, don't read version, is you're in trouble.

I came to the realized that technology was actually re-framing the utility of banking in the world around us. And this first principles design was the way China and Kenya and others were getting at it. And you're correct, the green field makes it easier, but the outcome in terms of where we're going in the West is the same destination. It just may take us a little longer because of that embedded friction that we have in the system enshrined by regulation -

Jo Ann Barefoot: 18:55 [crosstalk 00:18:55].

Brett King: 18:57 Yeah. It is going to just slow that process down.

Jo Ann Barefoot: 19:01 So it's going to take over because it's just better, the consumer

wants it, and it's cheaper, and therefore more competitive-

Brett King: 19:10 It's faster, cheaper, it's more contextual, it's more secure, it's

more responsive. I mean, you think about just a basic credit facility today, how do banks think about that process? Come to us, jump through the hoops, if you're not too risky, maybe we'll give you access to credit. Whereas a first principles designer says, "Well hang on a second, let's step back from the problem.

Why do you need credit? Where do you need credit? Let me now design an experience or a use case where you can get access to credit when and where you need it instantly in real time. And guess what? If you don't qualify then you don't see the offer. Because that's just a data problem. What I don't need you to do is I don't need you to jump through hoops and wait five days or seven days for a plastic card to come in the mail."

Jo Ann Barefoot: 20:05

So you say you think it's going to come here via voice first, probably. So flesh that out a little bit more. Take the early adopters inside the US market, are they, do you think that they're going to be taking advantage of the FIAT financial products? Or do you think that there's going to be people coming here with [inaudible 00:20:30]? Or do you think our providers are going to adopt these models? Cannibalize their old offerings?

Brett King: 20:38

It could be really interesting. Many in the West, I just read Kai-Fu Lee's book on AI Superpowers, and talks about the fact that many in the West still think of China as this copycat ecosystem. Copies the West. And that was true back in the 2010, 2012. But since then, they've got a much more competitive environment than the West. Larger markets, a lot more at stake. So their innovation has now outpaced America. But I could see the US and the West, in general, copying the Chinese model because it just works so much better. But I think the real change will be contextual credit. That's the big shift. And so obviously savings is already started to change. We see behavioral gamification of savings, Digit, Acorns, our movement here. [inaudible 00:21:37] in China, the biggest savings product on the planet today, about \$300 billion of assets under management. None of them require a branch for deposit taking. So you had already a fundamental rethink of what makes a good savings deposit service. Credit's the next one.

Now credit is where it's purely a data problem. To be really good at providing credit in the real-time world, you need to know your customers when and where they need the credit. You need to anticipate their need or have some sort of trigger, like a low balance trigger or something. So the examples I use in the book are things like going to a grocery store and not having enough money to buy your groceries you normally pay for. If I know you already spend \$500 on groceries at Whole Foods, but you've only got \$300 in your account today, that's an easy trigger for me to provide a solution to that.

So moving away from products to experiences. And that's the key shift that's happening in financial services. So if you're trying to take your existing product and retrofit it for digital, you're missing the real opportunity for technology shift. So the stuff we've seen on voice today mostly has been retrofitting product on the voice. Like CapOne, who was the first bank in the US to launch, they had you could pay your credit card with your voice. Which, again, if I'm redesigning it from scratch, I'm not going to have a piece of plastic, I'm not going to have a credit card product, I'll just say to Alexa, "Alexa, can you ask my bank if I can borrow some money?" Or something like that.

Jo Ann Barefoot:	23:25	And probably also more so-called uberization of finance where
		we have the payment is set up however it should be, we just do

the thing and pay for it later.

Brett King: 23:41 With Amazon's Go treatment of the checkout in the store and

so forth, that's clearly the way we're going. There's that, the payments will just become invisible. Highly, highly automated.

Automagic.

Jo Ann Barefoot: 23:56 Yeah, which will make people worried that it will cause us to

spend more than we should...

Brett King: 24:04 And that is a consideration. But obviously we can also support

better financial health through the tools and technology.

Jo Ann Barefoot: 24:14 Absolutely. So you've talked about these systems being more

secure. And people sometimes don't stop and think about the fact that our current system is not secure, even if it has a lot of security traffic on it. But what do you say to people who are really concerned about data and privacy? We're recording this in the midst of the controversies following the Cambridge

Analytica-

Brett King: 24:14 Cambridge Analytica.

Jo Ann Barefoot: 24:43 ... Facebook and so on. What's the public policy solution, in your

mind, being able to enjoy all the gains we can have through robust use of data while still letting people have some control?

Brett King: 24:59 So I think, ultimately, we'll see data in two ways. We'll see data

that's only of value when it's leveraged and data that should be kept sacrosanct and secure. So think of it this way, I do think we

ebb and flow on privacy. You can go back 30 years and you'd come home from school or whatever it was and you'd find a big book on the doorstep, on the stoop, and once a year was a white book and once a year is a yellow book. And you'd open up that book and it would have everyone's name, address, and telephone number for the entire city. And we used to think nothing of having that data in a phone book.

And we willingly share so much of our life through social media today. The reality is, a lot of the stuff that ... a lot of the data that will be based on observation of us, of what we share, is probably not secure. Where you go, what you do. And that data is not necessarily a public asset, but it's almost like utility.

Jo Ann Barefoot: 26:30 It can be gathered.

Brett King: 26:31 Right. But the data that's important about you, things like your

bank account, your medical records, your DNA, for example. That should be secure. And that should be secured by a much better authentication methods than we currently use. And should be secured biometrically. It should be secured in a database that is very difficult to corrupt and hack. And so when you combine technologies like blockchain and facial recognition, as an example, you could get there. You know the biggest weakness we have in terms of data privacy right now is not necessarily the fact that we give it to organizations like Facebook and they're sharing it, but actually the things like our data, like if you're in the US, DMV records, medical records, are

Jo Ann Barefoot: 27:29 Hackable.

Brett King: 27:30 Yeah, hackable. So we need to update identity infrastructure as

a priority. So that's again why China's ahead of the curve here. While we're screaming about civil rights and the fact that 1.3 billion people in China will have their face in a facial recognition database, we will have to get to something similar in the West to provide that data privacy and security that is required. You

can't have one without the other.

on databases and systems that are old and ...

Jo Ann Barefoot: 28:02 Yeah, I think we have talked about this in prior shows, but I

think the US is waking up to the fact that we have ... it's back to the being victims of past success. We've had a system of identity that's worked pretty well for most people, well not everyone but now it's not secure. And we're gonna have to

figure out how to make it high-tech or we can't protect identity anymore.

Brett King: 28:27 Absolutely.

Jo Ann Barefoot: 28:28 It's all for sale on the dark web. Let's turn to the regulatory part

of it. So these are mold-breaking trends. They don't fit neatly into our regulatory boxes. That's not anybody's fault. But what do you think are the biggest challenges for policy makers and what kinds of principles or pathways should they be trying to

follow?

Brett King: 28:56 To regulate in a real-time world, you essentially have to embed

legislation and regulation to make it enforceable in code. And so you put regs in code, but then if you think about the policy process, policy process in governance leads to changes in that code over time. So there is an opportunity right now as we consolidate current regulations, and put it in code, to rethink a lot of the regulations we have. For example, this crazy regulation we have in the US called the Community Reinvestment Act, which mandates banks to continue to

operate branches, is -

Jo Ann Barefoot: 29:53 It evaluates whether they do.

Brett King: 29:53 And Design for Financial Inclusion in 1977, there are much

better ways of creating that financial inclusion today through the use of technology than insisting a bank leaves a branch open in a small town. And then when you try and do ... when you try and do products here in the US around savings and credit, much the same in the rest of the world, the regs have been written based on the products that we distribute through branches. And yet if you look at the Chinese model, many of the products, or even just what M-Pesa announced with their real-time overdraft capability, it just doesn't fit a model that you have in the West being analogous to the branch. And so as you shift into this real-time mode, you're going to increasingly have these experiences that break walls. They're not compliant with the current laws. Because the current laws were not built for a real-time digital world. So the problem, very definitely is the laws. They're simply out of date.

The other issue is the role of regulators itself in this ecosystem. Now one of the reasons China has been able to move so rapidly on this is they've got a lower touch regulatory environment than much of the West. The more regulation you have, the harder the ship is to turn. So I think you're also going to see a shift away from this heavy examination enforcement-type activity. So more of an overall supervisory role based on the technology. So the technology will flag the instances of non-compliance and action will be taken off that. Not individuals going around auditing the banks and advisors we do today. So the cost of regulation will come down, the complexity of regulation will come down. If you look at something like the US, the fact that you have 50 different state regulators and then you have multiple regulators responsible for banks and various functions of the banks at the federal level, probably means dramatic simplification as well.

So you do see London and Singapore as really stood out as two regulators that are willing to rethink this. But in the mean time, China has just got on with it, which is quite interesting.

Jo Ann Barefoot: 32:47

We have shows with some of those leading regulators around the world that we'll link to in the show notes. So you and I are both, right, techno-optimists. We see the potential for making, through the technology, to solve problems that have been there forever. That used to seem not solvable. And do better for everyone, more inclusion, more transparency and all of it.

Nevertheless, let's turn it upside down and ask what should we be worried about and how are we going to protect consumers from harm and how are we going to protect, if you've got thoughts on the financial system itself, absorbing all of this change and staying stable and level?

Brett King: 33:36

The biggest concern is inequality. That access to technology tends to exasperate inequality. And as artificial intelligence kicks in, and we have technology-based unemployment, it's likely that the middle-tier jobs will actually be the first to go. So the low-skilled service jobs probably have good retention, because as more work comes into play, a lot more of those services get deployed at an individual level. But the process automation stuff, the stuff that's check the boxes or where you have to teach a human several steps, that's the stuff that Al is going to be really, really good at. So accountants, lawyers, bankers, financial analysts, diagnosticians in medical field, all of that is up for grabs. As technology-based unemployment kicks in, the owners of the technologies that have done the displacement get richer and richer and accumulate more wealth. Those pools of wealth grow while people are displaced from their

employment and get pushed out of middle class and low to middle income, scrambling for work. And you have the potential for a worsening income gap. So that's the key problem. The only way, really, to attack that is policy and rethinking the economics model that we've built since the Industrial Revolution. It's a pretty big shift.

Jo Ann Barefoot: 35:27 So more safety nets, more sharing of ...

Brett King: 35:31 Yeah, we'll have to be a lot more socially aware and socially

responsible both as corporations and as societies. And this current winner-takes-all, survival of the fittest-type of mentality just won't work in that environment. There's a lot to be said for things like universal basic income in the future, potentially, as a way to do that. If we don't deal with that inequality, then history teaches us that social unrest will result. And its' binary. You either deal with it or you have massive conflict at a social level. There's a period of time you can hold back that social unrest, but not for long. When you've got over half the population affected by this, then ... like for example youth unemployment reaching 40% or something, kids coming out of university with \$150,000 student loans and no jobs to go to, you

have to have something ...

Jo Ann Barefoot: 36:47 What do you say to those who say that the technology will be

creating good jobs that we can't even envision today to replace ... people say we don't have buggy makers anymore, but we

have other jobs instead?

Brett King: 37:01 Yeah, yeah. No, so I mean social media marketing managers, the

fact that movement as a Fintech exists is an example of that creation of new business models and new entities. But the rate that they scale of which AI can disrupt employment is bigger

than anything we've ever had.

Jo Ann Barefoot: 37:22 And the speed.

Brett King: 37:23 And the speed. And so we won't be able to, I don't think, build

jobs fast enough to replace those. The key issue here is we're not very good at anticipating changes like this from a policy perspective. So even though we know climate change is coming, even though we know AI is going to be extremely disruptive, we sit back and debate it until it happens and then by the time it's happened the damage has already been done. That's human nature, unfortunately. I wish it wasn't. I wish we could ...

Because if we were planning this properly and restructuring things, it'd be easier. But the real change is supply and demand economics. I'm writing about this in my new book, Rise of Technosocialism, which comes as a sequel to Augmented.

But if you look at Economics 101, you got the supply curve and the demand curve and you've got price, quantity equilibrium. So those were the mechanism of Keynesian, Adam Smith supply and demand economics. But when you've got AI, and you put in a supply and demand curve, AI, of course, takes a while to build but once it's built it can essentially reach infinite supply without any ... or infinite demand, rather, without any need for additional labor force. And that's the big shift. Because in a conversion economy like we have from the Industrial Revolution, as demand increased, more people went into the labor force. That's not the way it works with AI.

So it's a really fundamental economic shift and that's when people are debating whether AI's going to create enough jobs to fill the ones that are lost. That's the point that's often lost in the discussion, that it is a rejigging of the supply and demand curve.

Jo Ann Barefoot: 39:22

I was in a meeting the other day on AI, when people said one of the jobs that it'll create is more counseling and social adjustment, therapy, and so on for people trying to figure out how to cope with living so much technology woes. If we frame it back in financial services, so a lot of us have this vision that you've talked about, we're going to have a smart assistant, and that smart assistant is going to not only take care of a lot of our financial tasks but also have the sophistication that some of us don't have ourselves to figure out that this thing is a scam or this is we're not saving enough or whatever. And be our guide and our coach and our, depending on how much we would like to empower it. Is that your vision? And if so, what is going to be the business model that will make that entity trustable? That they won't say now that you trust me, I'm going to refer you to something where the provider of that service gets a commission on the data or sells your data without you focusing on it or whatever? This is making you smile, that's big.

Brett King: 40:52

No, well the trusted advisor, if you think about the trusted advisor, whether it's your private banker or your wealth manager, or your doctor, the reason we've learned to trust those guys is based on the quality of their advice. Now, obviously, I've had financial advisors that have given me bad

advice. But I still work with them. I've had doctors that give me bad advice. That's why we always get a second opinion on medical stuff, because humans are not very good at advice. So I think that trusted advisor stuff, the way it works with humans, will work very similar with these algorithms. The better the algorithm at filling our needs, adjusting to our behavior, and providing what we need, the more we'll come to trust that ecosystem, and I think that's how ecosystems like Alexa and Siri and others will differentiate.

Jo Ann Barefoot: 41:59

And do you have a view on what will be the organizations behind that? Will it be Google and Amazon? Will it be ... who is going to be building that bridge from that world to where we are?

Brett King: 42:14

So right now, the voice-based operating systems that are emerging, the tech players that are in that technology layer. So whether it's the ... you got to think about who owns the ... initially it started off with who owns the speaker, that has the assistant built into it. So it was Alexa and it was your iPhone handset and so forth. Now those ecosystems are becoming more distributed, so they're becoming voice-based operating systems. So just right now, there's two dominant ones, obviously Amazon Alexa and iOS with Siri, but others are starting to emerge into that mix. But I think the really interesting player might be health and Apple's definitely getting big into health. So if you can start to manage someone's health using voice, I think that's a way to create some dominance as well.

Jo Ann Barefoot: 43:14

Give an example.

Brett King: 43:18

Alexa, what should I have to eat today? Alexa, can I afford to go out to dinner this weekend with my friends? When can I afford to buy a new car, Siri? Now that sort of advice, where if I know your behavior, I know how you're currently spending, and I know what you're doing, I should be able to give you some solid advice on that. And that's where I think banking is taking us, frankly. That data availability is going to be pulled in by the tech giants. They're the ones that are going to really leverage off that data.

Jo Ann Barefoot: 43:58

I've always thought that at the heart of this vision, there's the hope that ... Our regulatory system is sort of built on the assumption, sometimes spoken, sometimes not, that the market will ... the private sector will take advantage of the customer if it can. People will charge as much as they can, a consumer, you have to protect yourself, you have to drive a good bargain, and so on. And in financial services, we know that's hard because the provider knows more than the consumer. It might be that these systems will become transparent enough and enough dependent on being trusted that they'll be competing for trust.

Brett King: 44:47

Yeah. Well I do think that the same mechanisms which create this huge amount of data that we're sharing also creates more transparency.

Jo Ann Barefoot:

45:01

Exactly.

Brett King: 45:02

And so Facebook couldn't get away with Cambridge Analytica for very long because the effects of that were felt. And so I do think that this technology will be more transparent and it'll be more obvious if they're trying to manipulate you.

Jo Ann Barefoot: 45:28

I know we're going to run short of time, and I loved this conversation, looking out five years, ten years further. Bringing it back to today, and remember that we have many listeners who are bankers and Fintechs in Fintech 101-type companies, what is your advice to people who are in this space? Where should they start to learn to adjust to this world and to find how to go back to first principles?

Brett King: 46:05

What I advocate in the book is just start with take the top five customer interactions you have and just try starting from scratch, redesigning them without the bias of how you currently do the system. Try that as a first thing. If you're a CEO of a bank today, work out how you take all of the service you deliver to customers and deliver those in real-time without a signature. That's a good start. And for many banks in the US, in the West, that's a really, really daunting prospect because they don't know where to start with that process. But the Fintechs, they're ready. No Fintech's going to get you to sign a paper application form ever. That's part of the shift.

But I think in terms of us individually, preparing for this change, the most important skill that you can have to survive this era of change is adaptability and your ability to learn. If you read stories about Elon Musk and how he learned to become a rocket scientist, his ability to take in new information and apply

that is phenomenal. And I think that's how we need to train our kids to survive in this world of the future. They're not going to have a career that's going to span 40 years. They're not going to go to university, come out of it and they've got the job for life. It's not going to be like that. So their ability to adapt, to learn new skills, is going to be absolutely critical. That's harder for us older folks.

Jo Ann Barefoot: 47:49 We have to embrace it. That's the first thing.

The reality is, if you want to take one lesson away from what **Brett King:** 47:52

> I've learned through the years of researching this stuff, is in the last 250, 300 years, the number of times that humans have successfully stopped technology innovation from disrupting their community or workplace is zero. It just doesn't happen. Why are we having this debate about whether AI is good or bad? It's going to happen. We must adapt. And so we'd be much better off spending our time at thinking of how to adapt and how society should adjust to this, rather than debating whether it's a good or bad thing, frankly. Because the reality is we know it's going to impact society. We know it's going to happen. The capital markets are geared towards encouraging the fastest technology innovation possible because that represents competitive advantage. So there is nothing in our ecosystem that tells me that we're going to be able to stop this march of technology and go back to the way it was despite the political movements at the moment which are trying to do that. It just

won't be successful.

Jo Ann Barefoot: 49:09 I completely agree with you. Is there anything we haven't talked

about that you want to share?

Not really. Obviously, for me, Bank 4.0 is a pretty important **Brett King:** 49:15

> book. It's probably my last banking book. I'll probably go full futurist after this. Some people have asked me what is Bank 5.0? And I said it's when banks and cash disappear. So I think that I don't know if I'll be around to write Bank 5.0, but I'm really interested in society's adaptation to these changes. I'll be writing a lot more about that. I'm really grateful for the opportunity, Jo Ann and thanks for collaborating with me on the

book.

Jo Ann Barefoot: Yes, it was such fun and you have a whole group of co-authors 49:55

in various parts of the book -

Brett King:	50:02	Right, so Chris Skinner wrote the case study on Jack Ma from his visit to Hangzhou, which was great. Duena Blomstrom contributed. We have Brian Roemmele discussing voice and the impact of voice on banking, and Brian's probably one of the premier guys on voice-first tech. Jim Marous, of course, who's a good friend and has written some great research in the book. So yeah, ton of really phenomenal contributions.
Jo Ann Barefoot:	50:41	So we will put a link in the show notes to the book. Do you want to give any other information on how to find you or Moven?
Brett King:	50:51	Yeah, you can go to Brett King, brettking.com, double T for Brett. moven.com, of course, for the startup. provoke.fm or breakingbanks.com for the radio show. And of course, you can search on Amazon books, number one new release on Amazon for banking right now, so I'm very happy with that. It's done great. And yeah, follow me on Twitter, connect with me on LinkedIn, and if you've got a question or want to shoot the breeze on first principles or banking generally or the future, happy to do that.
Jo Ann Barefoot:	51:25	Well I love talking with you. Cannot recommend highly enough they should read everything you're putting out and book you as a speaker, of course. You're always the highlight of any conference where you speak.
Brett King:	51:40	And that comes back to the storytelling, I think. That's what I've really learned out of this whole process. Our brains are wired for storytelling.
Jo Ann Barefoot:	51:47	They are.
Brett King:	51:47	So it's a big part of my future, is finding the stories that resonate.
Jo Ann Barefoot:	51:52	And you know, something we didn't mention but should, is that we are both directors of the Center for Financial Services Innovation, which is another thing that we share and CFSI does so much great work, especially financial innovation.
Brett King:	52:07	Really proud of the work that we do with Jan [Tesher 00:52:10] and the team over there. And part of my awareness of the gap that's emerging in Western society around technology and wealth accumulation is come out of the research from CFSI.

Jo Ann Barefoot: 52:27 Yeah, great, so we'll link to that, too. Brett King. Thank you so

much for being on the show today.

Brett King: 52:33 You're very welcome.