Nubank: The Missionaries of Modern Banking

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David Vélez (DV): We saved something like $20 billion in fees that our customers would have had to pay to that oligopoly of five banks if we didn't exit.

Lawrence Burns (LB): I was getting signals quite early on that there was something special here, before I really actually understood what that was.

DV: Financial services, I would say, is probably the most underappreciated opportunity in technology around the world.

LB: It's possible that, at some point, Nubank could be the world's largest retail bank.

DV: Customers will choose whoever treats them the best and gives them the lowest price. It's not more complicated than that. If you are in a competitive market and you offer the best product at lower cost, you win.

Claire Shaw (CS): Hello and welcome to season three of Invest in Progress, brought to you by the Scottish Mortgage team. I'm Claire Shaw, portfolio director. In this podcast, we take you behind the scenes to hear the conversations that take place between the Scottish Mortgage managers and leaders of some of the world's most exceptional growth companies.

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On today's episode, we welcome David Vélez, the CEO and co-founder of Nubank. 12 years ago, the financial system in Brazil was dominated by just five banks. For the millions of people trying to access credit, or even just open a bank account, it was a long, laborious and expensive process, with those banks profiting from the complexity. So from an apartment in São Paulo, three friends set out to dismantle that complexity using data and technology to build a better solution.

Fast-forward to today, Nubank is the world's biggest neobank outside of China, with over 114 million customers across Brazil, Colombia and Mexico. The company has revolutionised the Latin American banking landscape by offering a seamless, fee-free digital banking experience, and built up formidable brand strength and loyalty. Looking ahead, Nubank imagines a future where digital banking is the norm and financial inclusion is a reality for billions, worldwide. So it is my pleasure today to hand over to David Vélez and Scottish Mortgage manager Lawrence Burns.

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LB: David, thank you so much for joining us on the podcast, we really appreciate your time, talking to us now from São Paulo.

DV: Thank you, Lawrence, for the invitation. Happy to be here.

LB: So, I wanted to start off, really, with the question that we ask all of our guests, which is to ask what is the problem that Nubank is really trying to solve in the world?

DV: So, we started with a question very early on, with some hypotheses around financial services. I always tell the story of me trying to open an account, going through a bulletproof door in São Paulo, almost begging for five months to get a simple account, struggling like crazy to get it, and then, eventually, finally making it, and the amount of frustration and rage that that entire process generated.

And while we started with figuring out how do we solve that experience, I think ultimately the conclusion actually was that the enemy was complexity, that what we wanted to solve is complexity to empower people. And so that has been the core purpose of the company since the very beginning.

Actually, Nu, the name, comes from, in a way, naked in Portuguese, because it comes from this view that once you remove all the clothes and you become naked, you solve that complexity and you become simple, and once you're simple, you're empowered. So it is fighting that complexity to empower people that is underneath the key vision and existence of the company.

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LB: I suppose one of the things that was always striking to us was the combination of what a bad job the traditional Brazilian banking industry was doing for its customers, but also how much money it was making doing such a bad job. And I think if we fast-forward to where we are today, you've been able to upend that banking system and create what is the largest neobank in the world outside of China. You've got, as of last quarter, 110 million customers, you've got more than one in two Brazilian adults are your banking customers today.

But I think we were keen just to start with where that phenomenal journey began and, in many ways, go back to, I think it would be, 2010 when you started at Stanford. And you were at business school then, and I think what happened was, in the first couple of weeks, you found out that Sequoia were looking to start in Latin America, and that, for a connection for a friend, Doug Leone had asked to talk to you. Maybe we could go back to that time of where it began and just how it came about and what happened?

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DV: Sure. Yes, so, I'm originally from Colombia, I come from a family of entrepreneurs, and the dream was always to start my own business. But it took me a while to figure out how and where, and where should I even begin. And so I went to the financial services industry, being an investor with General Atlantic first, then with Sequoia. I went to business school to get, finally, two years of vacation to have enough time to figure out, okay, how am I going to start a business?

And as you say, a couple of weeks in, Doug Leone at Sequoia calls me and says, hey, we're thinking about opening this in Brazil, come talk to us. And so after two years at business school, I went back to investing and I looked at a lot of early-stage companies, but I wanted to start a business. I envied the person that was on the other side of the table that was starting the business. I wanted to be him or her.

And in 2012, after two years of going back and forth from California to Brazil, we came a bit to the sad conclusion at that moment, which was, man, this is one of the most interesting regions in the world, from a population perspective, 650 million people, big GDP, there should be a lot of start-ups, but there are actually very few, and they're not that interesting. They're all copycats of US start-ups, and these are not just the disruptive, innovative business models that Sequoia wanted to back.

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And so, at that point, we said, okay, we're done with Sequoia LatAm, felt like a bit of a sad conclusion to a chapter but, at the same, for me it was a huge blessing because I was liberated to go and finally do what I wanted to do, which was start a company.

And that's when I had that experience that I mentioned initially, of trying to open a bank account, and it was absurd how hard it was to get a simple account in São Paulo, in the middle of Faria Lima, which is almost like the centre of financial services in Latin America.

And so from one end, I started to understand that consumer pain, and I started asking my Brazilian friends, how is this possible? And what I heard from everybody was like, well, yes, it's not great but where are you going to go? You're going to go from bank A to bank B, same thing. From bank B to bank C, same thing. Fully commoditised industry, big oligopoly, where you have five banks that own 85% of the investments, credit card, insurance. And so that was interesting.

And then, technology was changing the landscape completely and opening a window of opportunity to reinvent banking. Smartphone penetration was starting to skyrocket in Brazil. The cloud and AWS enabled me to open a bank, have a bank infrastructure from scratch with a couple of hundred thousand dollars. If I had tried to do this three years before, I would have needed $14 million to buy mainframes from IBM. Now, I could build a full bank in the cloud without needing any single server. I didn't need a banking branch on every corner, billions of dollars of CapEx, this could be fully digitally.

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And then, more importantly, there was the opportunity to really focus on the consumer and produce something that consumers really loved. So as I got excited about the opportunity to reinvent banking through fully digitally, and with this culture of consumer obsession, then we went for it. And I think the market was readier for something new, something fresh, a new look, than all of us really anticipated in the very beginning.

LB: And where did you get that determination to go and solve a problem that was so difficult? Because as you said, when Sequoia were looking at the market, they were seeing lots of me-too companies, people that were doing Brazilian versions of what they say in the US, whereas this was novel and it was tackling a particular Brazilian problem. The banking industry had been entrenched for a long time, you weren't a native Portuguese speaker, you didn't have a background in coding, didn't have quite the same background in Brazilian banking.

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At the same time, I think I read somewhere that you were told by a number of your friends that this was actually a dangerous thing to do, not just a hard thing. And you were even told, actually, they might try and kill you for this. So where did that determination go that this was...? Was part of what attracted you the fact that it was that hard?

DV: Yes, I think one of the reasons to what to go into the entrepreneurship area was I was a bit tired of being too fragmented in my knowledge, seeing too many different industries, too many different companies, knowing a little bit of a bunch of stuff, versus having the focus and the patience to go all-in, very deep, on one single problem.

And given that's what I was about to do, then I wanted to focus on the single-hardest thing I could possibly imagine, the single thing that could have the most impact. Because starting a business was going to be probably as hard to do a hard thing as an easy thing.

And so when I started looking at a couple of ideas, and I had a couple of ideas, I also went and looked at what is the market cap also in this region? Because generally, they tend to be a bit of a data point to see where the biggest problems are. And the biggest companies traded in the BOVESPA in Brazil were banks, and the biggest companies trading in Mexico were banks, and in Colombia were banks. And so this was the single-largest industry, which meant the single-largest problem, the single-largest opportunity.

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For someone like Sequoia, that was the type of disruptive opportunity they also wanted to be excited about, and I wanted to spend my time doing something hard, not something easy. And what was interesting also is that doing something hard, challenging, ended up being actually easier at the end.

Because I remember looking at one copycat start-up in Brazil that was the Groupon of Brazil, if you remember Groupon. And at that point, in about three months, there were 3,000 different copycats of Groupon in Brazil. Every neighbourhood in São Paulo had their copycat of Groupon in Brazil. And doing something that seems easy actually becomes really hard because there are no moats, there are no barriers to entry, everybody is doing it, versus if you end up doing something that is really hard, few people will go through that door, few people will attempt to do it.

But ultimately, it's easier to hire the best people, the best people want to do something hard. It's easier to raise capital from the best investors, because the best investors want to be backing something that is hard. And so ultimately, it becomes a bit of a moat in terms of talent and capital that you can recruit.

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And yes, for a very long time, we faced a lot of scepticism. We heard from a lot of people that it would be impossible. Being an outsider, I think it was helpful in that, perhaps at times, it gives you a little bit of naïvety. You don't really know how hard it might be and you don't know fully what you're getting yourself into. But that's a positive at that point.

But ended up, ultimately, bringing insiders that helped me execute this plan and being able to actually beat it. So it was a true blessing to be able to focus on a hard problem that had a lot of impact.

LB: And the first two external investors that you were able to convince, Sequoia and Kaszek Ventures.

DV: That's right.

LB: I'm assuming for a lot of people in Brazil, raising money domestically would have been really hard. And so, these people backed you very early on, I think from the spreadsheet stage, where they would have put in $1 million or so, each. What was it that you think they saw in both you and the company at that stage, to back you?

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DV: Yes, I remember in the deck, in the C deck, there was one slide that was the little David fighting the big Goliath. And I always said that the response to that slide is very indicative of how Latin America investors behave and how Silicon Valley investors behave. When a Latin America or Brazilian investor hears the story of David versus Goliath, they run as fast as possible. Because, unfortunately, the story in Latin America has been that Goliath just crushes David again and again and again. Very sad, but that's mostly what has happened for a very long time, because David doesn't have the political connections, doesn't have the capital available, doesn't have necessarily the network. And so you're at a significant disadvantage.

So I showed that slide to a lot of investors in Brazil, and they just said, get out of here, they almost kicked me out of the door. But then I went to Sequoia and I showed the same slide, and to them that's the story of the biggest investments in venture capital history. The story of Apple is David versus Goliath. The story of Google is David versus Goliath. The story of Meta is David versus Goliath. So that's the type of story that they want to get excited about. That's what they want to be doing with their time, with their capital, backing those stories that might be low probability of success but, if they work out, they will reinvent an entire industry.

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And so, when I showed that slide to Sequoia, and they understood a little bit more what existed behind and what was the strategy, they were all in and they were very excited about backing that opportunity, when they had a past investing in every other Brazilian and Latin American company.

And Kaszek was the same. The story of Kaszek, if you know the Kaszek team well, they were the founders of Mercado Libre. Mercado Libre was also a small, little David going against a big Goliath of retailers in Latin America, and so they understood and they got excited about the vision. And so they went all-in, and raising the A and the B and the C was very similar. Unfortunately, in none of my ten years, basically until IPO, we were able to find local capital to back an idea like this one.

LB: I saw Nicholas in London last year and as you'd imagine sort of full of praise for what you've built and just saying he's never seen anyone that's executed at the level that you were able to execute at. How did you go about building that initial team? Because you had the value of an outsider perspective but then you brought in some of the things to complement that. I'd be interested to understand how you went about choosing your co-founders.

And I know from Sequoia's teachings they're very clear that who you hire in the first few days if your business has a massive impact in the long run on your culture.

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DV: So I remember the early days I had a really good conversation with Roelof at Sequoia, who basically tell me, hey David, listen, it seems like a really good, interesting opportunity, but you're not Brazilian, you don't know anything about Brazilian retail banking, you never did credit, you are not data scientist, you want to build a technology company, you're not necessarily a technologist. And I thought he was going to finish that entire listing with the conclusion of therefore don't do this.

But his conclusion was therefore your number one job is finding a team that is going to fill all the different gaps that you have in your experience. Being an outsider is great, you've found the opportunity, but you're going to need to be an insider also to be able to execute. And so with that it was a very kind of clear plan in how what I need to do next. And next was I needed a full insider that understood the space, the landscape, and that's how I found Cris, my co-founder, who came from Itaú, one of the largest private banks in Brazil.

And then we wanted to be a technology company, not a bank, and so needed strong technologies, and that's how I found my other co-founder, Ed, after meeting a lot of people. And the rest of that initial team following that view from Sequoia, that those first ten to 15 hires were critical, was always finding these different people that filled different gaps. But also that were aligned in terms of the culture that we wanted to build.

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And here I always tell the story of our first office. Our first office was this little house in São Paulo that looked nothing special. And we would invite people to interview to this new bank, backed by Sequoia, and they would come to interview and there was only two different reactions. There was one profile of people that would come to the interview with their suit and tie looking very slick with their very impressive sounding LinkedIn profile. And they would look at this office that looked like a house and say, what a waste of time, these people are crazy, I'm out, and they wouldn't even ring the bell.

And there was another type of people that would go in, yes, this seems a little bit odd but they would go in. And they would sit on the floor and there was a dog and my co-founder Ed came from the second floor. And after 30 minutes we would tell them what we wanted to do they said, this is awesome, I want to be here, I'm here on Monday.

And so that house became the best interview filter because only a certain type of people that were the missionaries, not the mercenaries, that were attracted by the challenge, that were attracted by the impact, but the complexity of what we wanted to build, were the type of people that were integrated in that initial DNA of the business. And once you have those first, ten, 15 people then you bring the next 100 that are consistent with those first 15 people and they help you interview them.

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And then the next 1,000. And then you start scaling culture based on those kind of principles and that's what has been an unbelievable way to maintain consistency of culture as we've been able to scale.

LB: And what was it like in the early days having to get the execution right? Having to deal with the early problems that came up? So I think it was, what would it have been around 2013 where you were looking to launch presumably your first product, which would have been the credit card, and one of the reasons for choosing that in my understanding was that there wasn't the same level of financial regulation, you didn't have to be a bank to offer it.

And you gave yourself about 12 months, I think, to launch it, and then suddenly the regulation changed and you had to be, I think, a payment institution, you had to be authorised by the central bank and your timeline got squeezed massively. But I'm just curious to sort of go through back of what were some of the biggest challenge and pain points as you started to scale the company at the very early days?

DV: Yes, so we raised $2 million with a deck and we had a lot of unanswered questions. We didn't really know if we were going to launch a financial product, if regulatory-wise it was going to be doable, if Visa or Mastercard were going to say yes to us or no. if they both had said no we would be done. At every point in that plan there were life or death decisions and gaps that we had to figure it out.

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And so the sense of urgency was huge, every day counted because we were going to run out money. And we had to be able to prove by the next round that we had a product, that we could get to customers, that we had figured out regulation, that we were able to attract a team, even on the face of so much scepticism. And so what that created was a map where we were always figuring out, every time that something, like a new obstacle came in we had to figure out how to solve it.

And we tell the story about how we integrated with Mastercard and having the days counted and considering getting to a plane, hand-delivering a form to Mastercard in Belgium because that would save us one day via sending that paper via FedEx. That was the type of mentality of how valuable time was as a very scarce resource.

And then you mentioned this regulation that changed, we initially thought this wasn't regulated and five months in suddenly is regulated and we had to operational by April of 2014. And if we're not we're going to be out, we're going to have to apply for license which meant waiting for two years. So that was completely not doable. So time was the most scarce resources and we were all in 24/7 trying to figure out obstacles as things came up.

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LB: And am I right in thinking that your promise to investors in the early days was that in 2013, I think you had 12 customers, that you would get to 1 million by 2019? And I'm assuming that most investors didn't think that was possible. But you actually managed to get to 15 million customers by 2019 in the end.

And as you went along that journey, are there any moments that stick out that really gave you confidence that this was really working? That the thing that you'd taken this big risk on, and had put so much effort in, was actually going to get you right the way to the finish line? Was there any particular sort of data points do you look back and go, that's when the probabilities really shifted in your mind?

DV: Yes, so the 1 million customers in five years felt almost impossible, felt crazy. Because we put that goal when we had no customers and we didn't even know if Mastercard was going to say yes to us, or Visa. Or we were going to find initially a banking partner that we needed.

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But then we work in that accelerated fashion and we launched the product for the few customers. We initially had 12 cards and it was the 12 of us, 12 employees. And there were a couple of data points that were interesting. The first was one we picked purple as a colour because it was the most anti-bank colour we could possibly imagine. Every single card in the Brazilian space was silver, was gold, they looked the same, they all smelled the same, they're completely commoditised. And purple was the craziest colour we could imagine.

And it was interesting to get customers to react to that because it immediately caught their attention, it's like, what? Some people loved it, some people hated it, but it created reaction, it created some kind of emotion. And I remember us going to a bar that was close to the office and paying the bill and the lady seen the card and said, wow, I really like this colour, can I take a photo of it and send it to my Facebook account where I have 30,000 followers? And we were like, sure.

It's like, interesting. We're starting to see the power of potential, power of social media, it was early days on social media. Then I paid a taxi with my card and the taxi driver tells me, I really like that card, I really like that colour, how can I get it. And I said well, give me your email, I'm going to send you an invite. And I write his email, put it in my pocket and when I get home I lost the paper. And I was furious, like how is it possible I lost the paper, I don't know how to get in touch with this person.

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So we added a feature in our app to send an invite to somebody. You could simply, if somebody was interested you put the person's email and it would send an invitation. And it turns out that people started inviting other people and we created certain benefits in the credit model where if you were invited by an existing customer there was a higher likelihood that you would get accepted. Because again, it's a credit card, we cannot say yes to everybody.

So that started to created this sense of scarcity in the market where people would go to social media to ask for an invite. At some point, we started seeing people selling this invite in Mercado Libre. For a free product. There was no VAT, no cost to it. But we started to see these kind of viral dynamics in social media where people were saying, wow this is unbelievable, they give us an opportunity to really wow the customer through certain experiences where if somebody called with a problem we would ask our team to go beyond.

Somebody called saying my dog ate the credit card, I need a new credit card, and our customer service team would send the credit card and they would send a toy for the dog and a handwritten letter saying, hope you enjoy it, have fun. And remember in a market where people were hating their banks and their experience, having somebody suddenly treat them like that was completely mind-blowing.

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So all of those data points in social media on the virality made us that in March 2015, I remember, we went from getting 500 customers per month, 1,000 per month, to one month getting 30,000. And partly it was also PR, there was an article in a specific niche publication that talked about Nubank and the benefits and then that really began the huge viral growth that we've seen since 2015 until today.

LB: And obviously one of the attractions for people signing up for those cards was not having fees, not being ripped off in terms of the cost. But the other one is that you alluded to there is the attitude of Nubank to the customer just being different. It wasn't, I think as you talk about in your experience of being made to wait for 30 minutes and almost treated like a criminal as you try and open a bank account. You decided very early on you were going to do customer obsession, a bit like Amazon, a bit like Netflix.

What led you to believe that that customer focus would be so much more important in banking and what are some of the other examples that have helped solidify that as part of your culture? Because I suppose there's different decisions that you make along the way particularly in the early years, that help solidify that. Because it's one thing to say you're customer-obsessed but you've got to show it through the decisions you take over many years.

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DV: Yes, no, so I think that early experience that I had with a bank kind of made me realise the customer pain. And it was very clear that as a company, as I said initially, our job was to fight complexity, to empower people, and effectively a strategy of the business was going to be building a product that people love.

And we set that as our number one cultural value which is we want to customers to love us fanatically. Those are the type of words that we use is love, as an emotion, which didn't exist in financial services, it was actually the opposite. And fanatically, we wanted fans, we didn't necessarily want customers.

We spent some time looking at some companies that had done that or that had tried to do that. I remember going with Cris and Ed, my co-founders, to Zappos in Vegas and spending an entire day looking at the customer service of Zappos. My co-founder Cris is a huge fan of Disney and we studied a lot of Disney create this magical experience. Obviously we're in a very different domain but there were a lot of things about how you build magic into a product or service.

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Amazon has been, they want to be the most consumer-obsessed company in the world. We love that view because ultimately, if you think about an environment of alternatives it's very simple, customers will choose whoever treats them the best and gives them the lowest price. It's not more complicated than that. If you're in a competitive market and you offer the best product at lower cost you win.

And so that value of consumer loves fanatically happens to also be our strategy as a business. We believe fundamentally that if we make customers love fanatically we will win as a business. All financial profitability, all financial metrics, will just follow that consumer love because customers will choose us. So that is almost like the philosophical basis of the business.

Then as we've executed that we've made a number of different decisions. I mentioned this example of our customer service team sending a toy for the dog, there were thousands of those examples where we were able to tell the customer, hey, you're more to us than a simple customer. We will hear from the incumbent banks but that's very costly to send a gift or a card. If somebody calls in, they want a higher limit because I'm getting married and I'm going to Italy on a honeymoon and our team would send a handwritten letter with the best restaurants in Florence and a travel guide.

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So it might seem expensive if you're looking at it from a very short-term orientation but once that customer puts that on social media and you get 100,000 likes, that's the cheapest customer acquisition channel you can ever imagine.

So we manifested that value in a number of those decisions. Then eventually as we scaled what has been more challenging is as you make financial decisions that you need to be consistent with that consumer love. There are plenty of examples, the example I love to tell more is a couple of years ago an analyst comes and says, hey, our revenue proactive customer just spiked. I say, well go, what happened, and what we heard was, well, there's a bug in the system and we removed a reminder email.

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And because we have this value, it was very easy to know what to do. We had to go put that email back, apologise to the customer for having forgot to remind them to pay on time, and give them their money back that they overpaid.

Remember, there's no regulator that is forcing us to do, there is no mandate that we have to remind the customer. We're doing it because we want the customers to love us fanatically. And this is a way to build trust with that consumer. And you might say, well, are you an NGO? What about financial profits? You had a higher revenue per customer, and now you're not going to have it.

And my custom is like, yes, it's true. We are sacrificing that short term revenue, because fundamentally we believe that that customer, once that customer receives that email saying, sorry, we didn't remind you. We just earned the loyalty of that customer for the next 30 years. And in the long run, that's how we tied up that value of consumer love to building a very valuable company.

LB: And you probably earned the loyalty of the next five, ten, 15, 20 people that they tell that story to, and they go, well, that's a bit different from a Bradesco or another bank within Brazil.

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DV: That's right.

LB: And it shows in many ways, in terms of your NPS scores which are some of the highest in the world. And I think when you were up in Edinburgh you were even saying that there was a period of time where one of our other holdings frustrated you a bit. Which was Tesla, where it had a slightly higher NPS score. But I think the latest data, you were saying, you're now ahead again in Mexico as the world's highest NPS for consumer products.

DV: That's right. And again, hard to prove this definitely. And if somebody has an example, please let me know. But our Mexico credit card that we launched had a 94 NPS. And we think it's the highest rated consumer product in the world. Higher NPS than a Tesla, than an iPhone. And it's amazing to see this in a credit card, in a physical credit card.

It just tells you how valuable credit in a good financial services product might be for a certain niche, for a certain population that has been very much left out of the traditional banking system. They've tried to get in, and they'd been left out. And suddenly somebody gives them a great product, and they immediately embrace it.

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LB: And how important a part of the early vision for Nubank for you was that you could do it through an app rather than a branch? Have much lower cost to serve, much lower technological infrastructure, fewer employees. And therefore you could address large segments of the population.

The traditional banks have gone, we don't want to serve these people, it's not profitable, our overheads are too high to do these too small loan amounts, too small checking accounts, and that you've now been able to address. Was that a large part of your thinking in the beginning, or was it actually just an output? Have you realised, actually, if we do this super efficiently we... You talked about TAM. In many ways you have a role in growing the TAM, it's not static even for you.

DV: Yes, one of the insights that we had at the beginning was tech companies were reinventing every single industry around the world. We talked about Amazon in retail, or Netflix on media, or Uber in transportation. And when you try to abstract the first principles of how that disruption happens, a key component is always efficiency and cost to serve.

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Through the use of technology, they are able to generate a cost structure advantage that if you use it on behalf of the customer, allows you to reach more customers, and charge less, with higher quality. It's magic, ultimately. Technology allows you to compete in an environment through magic.

And the same first principles should have applied to financial services. Nobody was doing it at that point. But if you think about it from the first principle, the same thing applies. Today we can serve 100 million Brazilians with 7,000 employees. And my competitors need 100,000 employees to serve the same amount of customers, and 7,000 branches.

The cost structure advantage that I have is so big that I can charge less, that's why I can afford not to charge any fees whatsoever. So it's a better product, it's simpler. I don't have to charge all of these different things, higher quality. And then there were about 250 million people in Latin America, or 60 million in Brazil that were completely left out of the banking system.

Because when you just have $1,000 to invest in a savings account, or when you just need a $100 loan, if you try to get that through a banking branch, the banks will not let you do that. A bank through a banking branch, they would lose so much money on that transaction that they would just shut the door in your face.

But if you have this cost structure advantage, we can get to these customers and say, hey, yes, you need, you have $100 to invest, we take that. You need $50 loan, we'll give you that. And we can do that profitably with our cost to serve, with a marginal cost that is going to be positive to us.

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So it is a huge advantage in both serving the banked customers, and a huge and fair advantage in getting to, in Latin America, 250 million people. Globally, over 4 billion people that have been completely left out of the banking system.

LB: And do you think that's been helpful, A, from a societal perspective, financial inclusion is good? And if Nubank is your first ever bank, and the first ever people that are lending you money, you're going to build up a lifetime relationship, potentially, with that, and affection for that company.

Is there also a benefit that you've experienced on the regulatory side, where I know it's been tough and difficult at times? But that there is this societal argument that, actually, for the economy and for society, Nubank is a force for disruption that is good because of that extending factor inclusion. And do you think that that is something that the regulators have understood and have tried as best they can to make some degree of room for you to operate effectively?

DV: That's right. I think, first, we've calculated we save something like $20 billion in fees that our customer would have had to pay to that oligopoly of five banks if we didn't exist. So first, with the business model, a tonne of money stays in the customer's pocket. They don't get redirected to the five big banks that own 85% of all the assets of the system.

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Second, you're serving 60 million people that were completely left out. And if you understand the reality of people outside the banking system is, number one, you get access to no credit, literally you have no access to a credit system. And if you do, you're getting money from loan sharks that are charging you 1,000, 2,000, 3,000% a year with a lot of criminality around it.

Second, you're putting your money under the banking mattress. If you're putting your money in a banking mattress, nobody's paying you any yield. It can get stolen. You're going to lose money from an inflation perspective. Your savings go down in real value, in real terms, every single day if that money is sitting in cash somewhere in your mattress.

The moment you bring 60 million people to this banking system, number one, you get access to much broader credit and lower interest rates. Number two, your money is growing every single day. One of the things that has been amazing to us to see, both in Brazil and in Mexico, is we put in green buttons in our app. Daily how much interest we pay on our customer's account. Every day we deposit a little bit of money.

And it blows people's minds because their mental model is, I have to pay the bank to keep my money. Because when they deposit money, money goes down. A combination of no yield and paying fees. That money goes down. Here, their money goes up every day. And so there's value there in increasing wealth. But even in changing behaviour. Customer will tell us, well, you know what, now that money's going up, I don't need to go to a restaurant, I don't need to do that, I can save for allocation. I can save to buy something that I want.

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So the societal impact of on wanting more competition in financial services has been gigantic. And then for society and being included, being able to get access to credit for consumption or for their small businesses, we have 4 million small businesses in Brazil, it's been gigantic. And we're very, very proud about that in those ten years as we've done.

LB: You've touched on a few things that in some ways are ingredients for a lot of the companies that we've invested in, that have been our most successful investments. One was customer obsession, size of TAM, the strong competitive advantage that you have through your low cost structure.

I suppose the other thing that we observe as an ingredient for the best outliers is when you have a company that solves one problem, and then uses that success, uses the relationships they've built with customers, uses the data that they've gathered and the resources to go and solve another bigger problem. And in many ways that was Amazon going from e-commerce to doing cloud computing. It's Tesla going from electric vehicles to autonomous to possibly humanoid robots.

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For Nubank I think it can be framed in a similar way. And I think you've talked about this in terms of multiple acts for Nubank. With act one being a lot of what we've talked about, winning in digital banking Latin America. In Brazil, where you have a large customer share, but you've got the opportunity to cross sell additional financial services, which is still early. And you've been tracking obviously very well in Mexico and Columbia.

I think act two, if I'm right in saying, is moving beyond financial services. And perhaps that goes to the idea of Nubank tackling complexity. Could you tell us a bit more about what that act two means for you?

DV: Sure. Yes, so as we talked at the beginning of the interview, the company purpose is to fight complexity to empower people. A lot of complexity in financial services and in Brazil, so great place to begin the company was financial services in Brazil. But there are complexities in financial services all over the world. And that creates an opportunity for us to eventually expand internationally.

And then also a lot of complexity in our verticals. I always tell the story that when we looked at the most disliked companies in Brazil ten years ago it was banks and telecom companies. Now banks are actually much better rated, including our competitors. We would like to think that we've forced an improvement in the overall level of banking in the economy, which is phenomenal.

But in telecom, there is an opportunity there. A lot of different fees, a lot of different complexity in their monthly plans. Prepaid minutes are three times more expensive than post-paid minutes.

So as we figure out, what I call, the assets that we've built over 11 years, we think we have the single largest digital only consumer base in Latin America. Over 110 million fully digital customers. We are one of the most loved brands in Brazil, one of the highest NPS in Brazil. And a very strong analytical backbone in all of the decisions that we make.

When you aggregate all of that, it gives us the opportunity to cross sell other products and services to try to fight that complexity at an effectively low customer acquisition cost. So that's the idea.

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What we've done so far is we've launched a commerce marketplace where we are cross selling different partners' e-commerce products. Our consumers get to have a very easy payment experience. They get to have credit at point of sale. And they get significant discounts and cash back. We launched a travel experience where now customers get to reserve tickets and reserve hotel rooms. We give a price guaranteed to anything they reserve. We guarantee it's going to be the best price that they can get.

And now we've done the telecom with NuCel, which is an entry path into the telecom space. And we'll try a bunch of different things here. Some of them might not work. But it is an opportunity for us to go beyond and try to be more to our customers, try to be solving more problems actively.

LB: And the third act, in many ways, is one that when we first met in the build ups to Nubank's IPO that struck me the most. Which was the idea and the ambition that actually it works well in Brazil, it's working well in Mexico and Columbia. There's a big world out there and there's a number of countries that have very inefficient and very unhelpful banking models to customers. How big a part for you of the future is the ability to continue to internationalise what you've built in Brazil?

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DV: So financial services, I would say, is probably the most underappreciated opportunity in technology around the world. Because it's a $7 trillion profit pool globally, where only 3% of the profit pool is today owned by the disruptors, by the FinTech's. 97% of that profit pool is still in the hands of traditional incumbent banks. They're using banking branches mostly that are having complex products that have legacy technology, that have legacy culture. Some of them are doing a great job digitalising themselves, obviously. But some of them aren't.

And so the fact that the disruptors own 3% of this market, just given the advantages that at least we've been able to prove the disruptors might have in financial services. Given that magic of having that cost structure advantage is extremely, extremely low. So ultimately we think this thesis of digital banking being the right way to bank 85% of the world population is a thesis that is in the first minute of the first half of the game.

And this is true. People want to be treated well. They want to pay less fees, gain great experience, and not have to go to branches. And this is true for any country around the world. Unless you come up with a very convoluted hypothesis about why any given person in any given country really enjoys spending two hours in a banking branch begging for a product, when you could do it in your cell phone in minutes. This is the future of global banking services.

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So, no, I think it's an industry and a product that is hard to internationalise. I would say it's harder than other industries. Harder than media or retail because it's very local in nature. Which means you're deeply regulated. Credit, it's hard to do it fast, you have to be very patient, you have to be very methodical, you have to be with a local brand.

You're taking people's money which means you've got to build extreme trust with consumers. This is not just buying a pair of shoes or ordering a pizza. If the pizza doesn't come in, fine. You're mad, but that's okay. This is your life savings that I'm asking you to give me, so this takes time to build a trust, therefore it's a model that takes long to internationalise. And we've done three countries in 11 years. We've been slowly and very methodical but we think that the next ten, 20 years for us, the opportunity really is global. There's multi countries. So, try Latin America and so we are preparing to go in that direction.

LB: To be fair, as you've moved into Mexico and Columbia, it's taken time but it's going faster than it did in Brazil, so hopefully you keep speeding up as you do that.

DV: That's right.

LB: Do you think expanding globally is both a nice to have but also something you need to do in the very long-term to be competitive, to be able to have the lowest cost to serve that you need global scale?

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DV: I think ultimately, yes. I think if there are people that are trying to build a global enterprise, that will give them access to a scale that it will need. That will give them access to data that we'll need to also build. Within the future of financial services, we haven't talked about AI necessarily but AI enables the creation of a new type of platform in terms of interaction with the customer. We talked a lot about AI private banker.

Is this opportunity that the lowest segment of the population has access to the same financial sophistication that today the top 1% of the population has. Digital banking hasn't solved that yet. It might solve access, it doesn't solve advice. So, we think the opportunity to get you and everybody else around the world having somebody that handholds them into their best financial decision.

Allows them to negotiate across all the different banks, around who gives me the best interest rate for my money, on deposits, on lending. To do that affectively is going to require a lot of scale, a lot of data. And reaching that scale would be a huge advantage, if you do it well.

LB: Glad you mentioned AI, because I don't think you're almost allowed to do a podcast for an hour and not talk a bit about AI. So, it's good we've brought that up. Can we delve a little bit deeper into your vision for how AI is both impacting your bank you now and will impact it in the future? Because I think your one has been, as you've alluded to, was the idea that the smartphone has enabled everyone to have a bank in their pocket. And I'm only just copying what you've kindly told us before.

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But that AI was going to allow everybody to have a private banker in their pocket and just what that means as that comes to fruition.

DV: Yes. I think a bit more of the obvious applications of AI, which are on the back end, on the efficiency of the bank. Obviously, there is a customer service efficiency and things that are, maybe less obvious, like using newer networks for credit decision and underwriting. For fraud, for regulatory compliance, for anti-money laundering. A lot of different applications that ultimately are going to make you be able scale faster with lower cost and lower cost means better product for the consumer. So, that's what, I think, a lot of people are executing.

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We're doing that too. We see real opportunity to be much more efficient. But I think, really, the transformation aspect of AI is exactly that. We see a lot of people that we've opened their first savings account, and that's great. As I was saying earlier, for the first time they're putting money digitally, they're saving, they're getting yield on their money and there's huge value in that. But we very quickly realised that there is so many things about financial services that they don't understand, that is so complex.

And if you compare that to, let's call it the top 1% of the world, around how they manage their finances, the top 1% of the world are going to be looking at what is the tax efficient, mass market or tax efficient, mutual fund to invest your money. Right? What is the right legal structuring to minimise the state taxes or to make it tax efficient? If I need a loan, I'm going to have to talk to five banks and make all the five banks compete with the lower interest rate. If I need a mortgage, the same thing. An outer loan, the same thing.

If you're in the poorest bracket of the population, none of that applies to you. You have no bargaining power. You're not going to be able to compete with the lowest interest rate. You're not even going to know what questions you should be asking when you want to invest. So, that's, fundamentally, very unfair. And a lot of people have talked about financial education, which really means doing YouTube videos to explain to people how to do this. It doesn't really work.

Yes, you're educating, because people do take the time to do some financial education cards and maybe you learn a couple of things. But it's not going to fundamentally change the way you make decision based on your money. So, within this concept of the AI private banker, which is this somebody, entity that's going to grab your hand and say, Lawrence, you need an investing. Let me tell you these are the different options.

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And, by the way, this is how compound interest works and this is the difference between you investing with a ten-year horizon in a month. Oh, you want to by a car, let me go and negotiate with all the different banks and get you the absolute very best loan on your behalf. Or you want to invest, you want to buy crypto? Well, guess what, all these crypto tokens are disinvesting, don't do that. That's a scam. But what about this, it could be different? This is what you need to be looking at.

To be able to do that, really, you need a fundamentally different approach to financial access and accessibility and I think that's what, eventually, I might be able to create.

LB: That would be a profound impact and I think it really comes back to the customer obsession, in that people are only going to trust your advice and trust to give you the data to fuel the advice if they believe in what you're doing. And so, you need to have that relationship to get a lot of that in that position of AI anyway. The final question we tend to ask is what does the world look like if Nubank succeeds? Or, perhaps, to put it one of your framings early, what does Nubank look like as we reach the second half of the game?

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DV: Yes. Well, I think first, the grand majority of the world's banking population is banked via digital banking type of solutions. Which means way lower cost financial services around the world. That also means three, four billion people gets included into the financial services. Just imagine for a second, getting four billion people access to credit for the first time, the impact of that could create in all of these economies. In terms of additional consumer. In terms of additional economic growth. In terms of new entrepreneurship.

In terms of new businesses that get created. In terms of savings that four billion people suddenly might have access to with interest rate that today they don't have access. It's a huge enabler for economic growth around the world. Especially if you have access to this AI private banker that is going to fully optimise the large marginal dollar in your bank account. The opportunity for optimisation, for wealth creation, for avoiding bad decisions, for getting yourself in a snowball type of debt situation, could be gigantic.

So, ultimately, I think it's just a huge amount of potential in terms of economic growth and improvement of billions of people's way to live as they access a very modern financial services system for the first time.

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LB: Great. Well, that sounds like a future, I think, we'd all be hoping comes to fruition as soon as possible. David, I just want to thank you so much for, firstly, just the company you've built, Nubank, which is obviously tremendous. We're huge admirers of what you, Christina and Ed have been able to accomplish. And thank you so much for spending time talking to us today.

DV: Thank you, Lawrence. It's been a pleasure. Appreciate it.

CS: Well, Lawrence, thank you for that discussion with David. I think our listeners will agree, that was a pleasure to hear him speak with such passion and vibrancy. And some fantastic anecdotes in there about his journey with Nubank. As always, we use the final section of the podcast to discuss the featuring company from our perspective, our experience of the company and our investment case going forward. So, Lawrence, let's start at the beginning, how did you initially come across Nubank?

LB: I think how we came across Nubank, in some way, shows the value of being and having a reputation of good, supportive, long-term owners. We first met the company when they were private, a couple of times. And then in the build up to their IPO, where they actually really targeted to have Baillie Gifford as an investor. And that enabled a couple of things. The first was that it enabled us to get a lot of time with the management team and with David in particular, well before the formal IPO process started.

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And in fact, we even ended up signing an NDA to get access to their IPO filing ahead of its release to be able to build our knowledge around the company. And that was the first set of interactions and then from there it was a question of building our knowledge base. And I, probably at this point, met the majority of fintechs in Latin America, the majority of the Brazilian traditional financial services. And we were also helped by the fact that we had this background knowledge around fintech companies around the world.

Everything from Ant Financial in China to Mercado Libre business in Latin America. And it was also helpful that Federico, who was the head of IR for a number of years at MELI, was also then the head of IR at Nubank. So, there were a lot of these connections that helped to build up that knowledge base and get to know Nubank at a quicker pace than we might normally do.

CS: And we've talked a lot about how charismatic and passionate David is, and it's incredible to hear him say he wasn't a native Portuguese speaker, he wasn't from a retail banking background, he wasn't a coder, he wasn't a technologist. But he saw a problem and he put everything he had into fixing it. So, that kind of determination is something that really stands out. But from your perspective, what is it about David that increases the company's chances of success?

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LB: I think it's interesting because in many ways with David and the broader team, I was getting signals quite early on that there was something special here before I really actually understood what that was. One example I give of this is, Doug Leone, who he mentioned earlier, who hired him at Sequoia, was on a podcast of his own where he was asked who are the three people in the world that you would invite to have a dinner party with. And the first one was Frank Slootman, the former CEO of Snowflake, who he said he wanted to discuss execution with.

The second was Elon Musk, to discuss scale of company ambition. And then the third was David, to discuss vision. And so, I think that was interesting, putting him on par almost with Musk there. And then, as I've met different fans around the world, actually I found out that a number of them are actually invested in Nubank. And when I asked them what attracted them to Nubank, the answer I actually get back is, David.

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CS: David.

LB: One of the other early signals early on was that you looked at their cap table and who they'd been able to attract. And you had Sequoia, obviously, who bring that Silicon Valley, destructive perspective. You had Tencent, who brought a very strong perspective of consumer inset and digital fintech from their own operations. And you had Berkshire Hathaway. And so, that was an interesting collection of validation points.

But if you push what is it in particular about David, I think it's not just that he's long-term, ambitious and super smart and charismatic, as you said. I think it's that he's been able to do a really good job of blending that disruptive internet culture with the traditional culture of financial services, and you see this in a few different ways. The first is you look at the founding team, he hired a Brazilian who does speak Portuguese, Christina, who at that time, was an executive in their credit division at Itaú, one of the leading Latin American banks.

And he, himself, spent a lot of time with the founder of Capital learning about how do you build a good lending business. Because lending is a really difficult business for fintechs to build, not many have at scale. He's talked about this at different points, where he says he wanted to replace the traditional financial industry. But just because it was no longer optimal, it didn't mean there wasn't a lot to learn from it. And I think that ability to be humble and realise that there's much to learn from the traditional industry has really helped him.

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And so, I think that's one of the key things. And if you look at the team, they've also brought in people from Capital to help them with the lending operation. Their chief operating officer was one of the top people at Capital. And Federico, who I mentioned earlier, once described it as saying they literally went out and got the Navy Seals in credit to help them do what they do.

CS: Love it. And David talked a lot about their customer-centric approach. Building a brand that people could love and feel fanatic about. These aren't emotions you'd normally associate with the banking industry. But he talked about this being a competitive advantage and, of course, the transparency, the lower costs, they're just complexity that Nubank brings. But when you think about Nubank, Lawrence, they have two types of competitors, if you like. They have their traditional banks on one side and those other neobanks or fintech platforms.

Can you maybe elaborate on what edge does Nubank have over these quite different types of competitors?

LB: Yes. I think the edge versus the banks is the easier one. What Nubank don't have is that they don't have thousands of physical bank branches and tens of thousands of employees. They don't have expensive and outdated spaghetti legacy IT infrastructure that is incredibly expensive to maintain but not very affective. And the output of that is a radically lower cost, about 85% lower than the banks because you're operating through a digital platform or through an app.

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And that means that you can both address customers whose deposit sizes, loan sizes are too small for them to be profitable customers for the banks and it also means you can address the existing bank customers in a way that is more profitable and is giving back something more to customers. So, not having fees, for example, is possible because of that low-cost model. And personal loans have lower interest rates but still good profit margins is possible because they have this lower cost to serve.

And they're able to reinvest that in a virtuous circle of getting greater and greater scale and greater advantage. I think the other one versus banks is that you could argue a disadvantage is that they don't have the data that banks do. But then the banks haven't been serving a large part of the population anyway and you've done a good job through their low and grow, so I'll lend you a small amount of money, see if you pay it back and then I'll lend you a bit more. Building a lot of proprietary data on people.

And then they've used machine learning on that to get insights and to be able to adapt to models that are much, much larger than traditional banks and are much quicker to adapt to changing conditions. So, I think those are some of the advantages beyond that this is a founder driven, tech first company that help Nubank versus the traditional banks.

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Versus the fintechs is a bit harder but it's still interesting. I think a key difference is that Nubank has really got principality of its customers. It's seen as a bank. It's not I have one financial service. It's not I've got a user interface I and it's good. Or I just use them for payments. They're really acting to their customers like a bank and being trusted as such.

They've built a large deposit base and they've built a large lending business. And I think that's been really, really, key versus fintechs, and that has lots of benefits. If you're customers really trust you and see you has a broader bank, the ability to cross sell is higher, so you could start moving into different types of personal loans.

And I think the other advantage is that your cost for customer acquisition is a lot lower. So, I think it goes to that customer obsession that you talked about, that they're being able to put themselves in a position of trust. And I think the other one, if you look globally versus fintechs, is that because the traditional banking system was so bad, that made the advantage offered by fintech far greater in Brazil, in Mexico and Columbia than it is in the UK and the US.

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Again, we covered bits of this on the podcast but interest rates are some of the highest in the world, fees are some of the highest in the world. That gives huge room for a disrupter to come in.

CS: And we mentioned that Nubank is the world's largest neobank outside of China. Over a hundred million customers. That formidable, competitive edge as you've described, of course, it all sounds very positive but we wouldn't being doing our job as investors if we didn't consider the risks. So, Lawrence, I'm interested when you think about the potential threats, what do you think is the most significant and why do you think the company is well placed to overcome these threats.

LB: Yes. I think one thread is obviously macro, they operate in a volatile Macquarie part of the world. That's been an advantage because, in some ways, it's set up the poor industry that they've got to disrupt. But they've got to be able to navigate that and it will mean that there will be bumps along on that journey. I think they're well placed to do that because I think that they're long-term. So, I think you've seen even signs recently that they're adjusting the risk appetite for the macroeconomic conditions.

They also have a very short duration loan book, which means they can change relatively quickly. And they have the technology to see some of those signals and adapt faster than some of the traditional banks, even if they do that well, but it's a risk. A second would just be competition. We invest in one of the most serious and formidable competitors, which will be Mercado Libre. We've also, more recently, invested in Revolut, which are also looking at Latin America and moving in, to a certain degree, and I think both of those are very capable competitors.

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But what I would say is that financial services has never been and I don't think will be a winner takes all market. So, the idea is that there could be two or three fintech winners, I think is entirely plausible. And I think that it's important to focus that fintech, at the moment, is only taking up a low single digit proportion of these markets, so there's a real blue ocean opportunity. This is far from a red ocean in terms of them killing each other to take market share. But it is one to watch over the long-term.

And then I think the third, would probably just be some combination of can they continue to expand into new products to offer their customers beyond the deposit account and beyond the credit card? And does regulation remain not a hindrance. And I think in Brazil, because of the social impacts of having improvements and access to financial services, the regulatory environment has tried to be less hostile and they've removed a lot of the barriers. You're seeing similar signs in Mexico.

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But this is a highly regulated industry and, in some ways, if you're successful that was going to attract a degree of attention from the regulators who might be worried about the traditional banking industry. But the advantage that Nubank has is that they go to the regulators and they say, well, we're boosting financial access, we're lowering the cost of finance, so what exactly do you want to happen here? Do you want us to be more expensive, so we take less market share? It's a good position still with the regulators.

CS: And maybe just a final question for you, Lawrence, David touched on the opportunity beyond Latin American digital financial services. I'm wondering, from your perspective, how big do you think that opportunity is and how material is it for the investment case, in your opinion?

LB: I think the possibility that this is a global bank and not just a Latin American bank was one of the key things that attracted me when I first met David. Because partly that gets you around the macroeconomic risk, but more than that it's that you have the ability to go off to some very large additional markets. And what we see time and time again with the financial markets is that they are averse for putting value on an opportunity until it's very tangible. And therefore, that means that that international opportunity, I think, is valued at zero today.

But there's a possibility it could be the majority of the business in ten years' time. It's possible that at some point Nubank could be the world's largest retail bank. And when you talk to David about what are the types of markets that he's thinking of entering in beyond Brazil, Mexico and Columbia, which in itself would be sufficient to underwrite the investment case. Yes, there's sometimes consideration of Argentina and markets in Latin America but I think more of the emphasis is really put on...

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There are other emerging markets where this banking problem exists, where we could provide technology and know-how to really solve it for people. And the scale of the ambition isn't just that it's talking about Philippines, Indonesia or Saudi Arabia, but even considering the US. Where you have a Hispanic population that is similar to Brazil and Mexico and it isn't particularly well served from the existing banking industry. And that opportunity could be potentially huge.

The other one that they occasionally talk about and they've made steps around is this beyond financial services. And that's the idea, at least in my mind, that they can leverage some of the things we've talked about. You've got a connection with the customer. You've got the customer's trust and you have a lot of data on the customer. So, what are the other pain points you can solve using technology for them? They've got a small e-commerce business.

They've recently become a virtual mobile network operator, so they don't have a telecom physical network but they're offering SIM cards. And I think that leads into lots of different areas of what are the other layers of value you can add on. And, again, I think this is a key point, is that our most successful investments are those that can leverage their assets, their advantages that they've done well on one task. To then go and do a few other ones. And I think Nubank has that potential and that's partly why it's so interesting.

Because it's hard, at this point, to write a blue-sky scenario that fully captures the myriad of potential that they face.

CS: Lawrence, as always, thank you very much for your insights. And I'm sure you'll agree, it's been an absolute privilege having David on the podcast. So, thank you.

LB: Thank you.

CS: So, thank you to Lawrence Burns and David Vélez for today's episode. Up next, we welcome the founder and CEO of Horizon Robotics, a Chinese company developing AI and robotic solutions for autonomous driving.

We get a lot of questions from shareholders about our investments in China, so you won't want to miss it. Subscribe now to be the first to listen. This is Invest in Progress, thank you for joining us.

Please note, capital expenditures or CapEx are purchase of significant goods or services that will be used to improve a company's performance in the future.

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