**Globally Speaking**

**Podcast 72 Transcript**

**What Does Blockchain Have to Do with Localization?**

**Featuring: Robert Etches and Michael Casey**

Michael S. I’m Michael Stevens.

Renato I’m Renato Beninatto.

Michael S. And today on Globally Speaking, we are talking about one of our items from the 2019 predictions episode.

Renato Yeah, blockchain. You probably saw that in the title of this episode.

Michael S. Yes. And for our listeners, we are going to take you on a bit of a journey that we went on.

Renato Blockchain is one of those things that everybody talks about, but we don’t really know all the things that are involved. We interviewed two very important, knowledgeable people about this topic.

Michael S. Yeah, so we thought we would jump in to finding out what is happening in blockchain in the localization industry.

Renato So, Let’s start our episode today with our first guest.

Robert Hello everyone, my name is Robert Etches and I am the CEO of Exfluency, which is a new startup within our industry and we’re looking at bringing together language technology with blockchain technology.

Renato So, blockchain—that’s an interesting concept. It makes me think of SGML back in the 80’s when everybody was talking about SGML, but nobody really knew what it was. What is blockchain?

Robert It’s an incredibly good question, Renato, to start with because I think blockchain technology is so new that if you hear anybody saying they’re a blockchain expert, then they’re lying, because it’s very difficult to be an expert in a field that is so new.

 So, what is blockchain? Blockchain is a truth machine. Blockchain is perhaps right now the only technology available in any industry that has full transparency, that gives power back to the people—something very important to me—that provides peer-to-peer opportunities. I heard a futurologist speak at an investment bank, actually, back in February this year, and he was saying that he thinks there’ll be more technological change in the next ten years than in the last 250 years. My belief is that blockchain technology will be behind a lot of that change. So, that’s how big I think it is. It’s going to drive many, many aspects of how we work. We’re going to go from things being centralized to decentralized.

 What does that mean? That means that you don’t go to a bank to make a payment transaction; you do it directly to the person peer-to-peer. You don’t go to Google to search, perhaps, or to Facebook for a social network; you create your own social networks where it’s the people in the network that own the network, and you don’t give away your data. If you give somebody data, it’s because you decide, and no other reason.

 Maybe one of the big things that people haven’t realized yet: the whole Facebook, Amazon, Microsoft, Google and Apple scenario, where we’ve seen these five companies sort of take over the world, and almost just accept it as a *fait accompli* that they’re going to rule the world from now on. These information gatekeeper companies—the only way that they will not rule the world, as such, will be through blockchain technology that will turn gatekeepers into gateways. The idea with Exfluency is that we want to create a gateway to multilingual communication. That’s our goal.

Michael S. What is the core technology of blockchain? Because we’re sort of talking about the effects of blockchain in many ways.

Renato Yeah, very inspirational but…

Michael S. What does it do? Because I understand there’s a distributed ledger?

Renato Let’s put this in context. It’s inspirational for some; it’s really, really scary for others, right?

Robert If you look at our industry, fundamentally, the industry has done very well, because we went from being basically a cottage industry to being a truly global industry. But we really are unable to keep up with the pace of demand. The industry now is covering something like $50 billion dollars a year of revenue, and yet the amount of multilingual data we’re being able to produce is negligible.

 I often wondered why the industry hasn’t looked at other models, and maybe the answer is because we’ve been very successful. You know, we’ve grown at six, seven, eight, ten percent a year globally, so what’s not to like? But perhaps it’s made us a little bit lazy in taking on new ideas. People can be intimidated by this, but I think what people have been worn down by—whether you’re an LSP or a translator—is the commoditization of our skillsets; that we’ve just become a commodity like toilet paper or carrots. I don’t think you can have a conversation for more than five minutes with a freelancer before this comes up. I think blockchain and the ability for it to be transparent and the peer-to-peer aspect of it means that perhaps we can finally get away from the tyranny of the word rate. Finally, professional people can actually charge a professional price for their work, and blockchain empowers us to be able to do this.

 Now you go to a company today and say that you want something translated into five languages, you can’t choose who the translators are. Even if you could, you have no track record of what they’ve done before, whether it was good or bad. There are about, you know, seven, eight or nine middle men involved, and often translations end up in maybe a country you wouldn’t expect them to be; you know, somebody’s doing German from India. One of the beauties of blockchain is you have this truth machine; this ability to trace exactly who has done what.

 So, one of the ideas that we’re playing with at Exfluency is the trust chain. We’re ranking people who’ve done work based on how well they’ve done in previous jobs within their particular vertical skillset, so that buyers can either automatically or manually say, “Okay, I want to work with this person,” because we can see over the last two, three months or years that he or she has been consistently good doing this very specific type of work.

 And we’re willing to pay that person whatever an hour because, like any other skilled professional within a given field, they’re worth it, and we can prove they’re worth it. So, this ability to prove is wonderful. The other aspect of it, I think, where blockchain is very clever is this ability to pay thousands or millions of micropayments very easily and without cost across the world. So, the so-called smart contracts that the Ethereum technology within blockchain wants us to use opens up for those possibilities as well. So, they’re just some of the things.

Renato When you talk about blockchain, the immediate association that people make is with Bitcoin.

Robert Mhm, yes.

Renato So, what is the Bitcoin element in Exfluency, and what isn’t?

Robert The first impulse with blockchain technology is to use it, for example, for vendor management. To say we can trace payments and we can trace back to our various vendors. But that is only half the story. For me, a true blockchain platform has to use the token very cleverly. Let me just give you this quote:

 “An effective token strategy is one where the exchange of a token within a particular economy impacts human economic behavior by aligning user incentives with those of the wider community.” This is a quote from a book called The Truth Machine by two American journalists: Michael J. Casey and Paul Vigna. I can really recommend it to your listeners. It’s a fantastic read.

Michael S. Well, let’s stop right there. Based on Robert’s recommendation, we reached out to Michael Casey, and lo and behold, we got to talk to one of the leading gurus of the blockchain industry.

Michael C. I’m Michael Casey. I am a senior advisor at the Digital Currency Initiative at MIT Media Lab and I’m the author of The Truth Machine along with my co-author Paul Vigna, which is a book about “Blockchain and the Future of Everything,” as the subtitle says.

Renato So, when does that future start, Michael?

Michael C. Well, there’s a famous quote from William Gibson, I think, that says that, “The future is already here; it’s just not yet evenly distributed.”

Michael S. You’ve clearly listened to our podcast because that is on like every couple of episodes, I think we refer to that quote. So, that’s great.

Michael C. Yeah, I mean, it is! It’s already here. And I think that if there is ever a technology that is at least trying to grapple with the second part of that quote, it’s this one. One of the problems we face in the blockchain space is that it’s actually looking a little bit too concentrated in terms of the power modules where the greatest amount of control currently is. But the vision behind it is one of a much more distributed future, where, you know, we get to own our data, where we get to own our currency and not depend upon intermediaries, where we get to have control of our assets and the like.

 There’s a lot to go and a lot that has to happen in terms of getting the technology to scale. Particularly if we aim for the more permission-less, broad, open public platform that many of us think ultimately is where we’re going to end up. If we’re going to get there, there’s a lot of work that still needs to happen in terms of how it scales, how it becomes more viable. But, look, there’s already building blocks being built, particularly I would say under this private blockchain structure, that is enabling proof-of-concept, but now actually real production environments, things like supply chains and internal procedures in certain companies, to actually get going and starting to happen.

 It’s still a long way to go to come to this broad vision, but we’re cutting out middle men and arriving at new efficiencies already in the system because of this tech. And the reason for that is that it grapples with the cost of trust, and the cost of trust is a source of friction in so many different ways. So, this is already happening.

Renato So a lot of listeners have heard this word blockchain. Your claim to fame is that you’re able to explain blockchain in layman’s terms. How would you explain it to me like I’m a four-year-old?

Michael C. It’s a record-keeping system to, you know, basically track transactions, data exchanges that nobody can control because of the fact that it is being managed by everybody; that we’re all keeping track of our own ledger, and we’re following a system to make sure that we all agree on how to update our version of the ledger in accordance with what everybody else is doing. And that process is what makes this thing unique because there’s no one in charge; there’s no single, central point of failure in which we have a trusted third party that is running the ledger, that we have to trust that entity to keep the record. This is a collective record-keeping system.

Renato So it’s not like the Iranian government that can shut down Twitter during a protest, or the Turkish government that can shut down Facebook, or whatever, because there’s no government controlling how information is exchanged and stored.

Michael C. The analogy is very good in terms of the lack of control. The reason why I think this is more important than people realize—when you say it’s just a ledger, it’s just record-keeping—people don’t quite realize how absolutely fundamental this record-keeping function is in society itself. All of these systems—managing data and collecting data and figuring out where it’s come from—is the kind of underpinning of our digital economy as it is right now anyway.

 So, if we can fix that layer, or if we can make that layer less beholden on these centralized entities, then maybe we can actually build distributed systems of social media and everything else on top of that.

Michael S. And that’s why this relates to the issue of trust. And do you see trust as different than confidence, or are they the same concept here?

Michael C. That’s not a bad way to think about it. We break down the word trust, and we think about it in its component parts. We can’t just sort of snap our fingers and create an algorithmic system that functions unless there is trust—another form of trust, in this case ‘confidence’ is a good word—in the functioning of that system itself.

 But I do think that if you can recognize that the record-keeping function is not corrupted, then all these other questions of trust can potentially be more effectively managed. I lived in Argentina for a long time, and I have had sort of exposure to people who have never been able to trust the record, whether it’s in their money or whether it’s in their property deeds and things like that, and as a result, there’s no trust in the broader system, right? The breakdown of trust across Argentina is like the defining feature of its perennial problem with financial crises because there’s no trust in the record-keeping system that underpins its monetary value model.

 They are interrelated, but at the end of the day, all that blockchain is doing is removing the need to rely upon, if you like, this one entity to tell us what the facts are. We can get those facts from a collective group. So, you’re removing the need to trust that entity; that’s the core achievement. From that, we can build other layers of societal trust and confidence.

Renato And what prevents blockchain to be more widespread today? Because I have a sense that when we talk about blockchain, we talk about Bitcoin—it’s still a futuristic idea. What is preventing this more widespread use of the technology?

Michael C. If we’re just thinking about it from the blockchain perspective and being a little agnostic about whether we’re talking about private blockchains or public blockchains—because they face very, very different scaling challenges—if we just think generally about the very idea of having a distributed ledger, whatever shape that takes, I think that sharing information is hard, engaging in collective activity is hard. And that’s what it always is. I like to tell people blockchain is a ‘we’ technology, not an ‘I’ technology. If we can all see how collectively we will benefit from this particular thing, then we might be able to come together and form consortia and go about it.

 Interestingly, that’s what’s going on: there are lots of consortia being built by people trying to figure out how they would collectively embrace a new blockchain standard to share information, right? But you’ve got, you know, business units within every company that have vested interests in maintaining the status quo. Their bonuses are dependent upon whatever profit line comes down spitting out the bottom of that structure. And they may well be disrupted because the process they’re doing is being essentially disintermediated by this technology.

 So, you get resistance within these organizations to the very idea of sharing within the structure, and as a result, they end up not being able to get around to reaching an agreement. But having said that, these consortia are working on these things—it’s not the first time that companies have had to come together and agree on things like standards and so forth.

 And I think it’s actually really quite interesting to think about how we have these other institutions that don’t quite have the same barriers to progress. And I’m particularly interested, ironically, in the role that development agencies play—so, the IMF, the World Bank, the UN. There really is a lot of activity going on in those organizations. And it’s partly because they don’t have the same constituency problems that for-profit companies, or governments for that matter, have, right?

 Governments are bound by politics and four-year terms, and companies are bound by profit and shareholder demand and quarterly bases, right? But in a development agency like the World Bank, yes, they have, you know, shareholders who are governments who have their own political concerns, but that’s sufficiently abstracted away from what the actual managers of these things have as their incentives. Their incentives are just to get as much food to refugees, for example, as they possibly can, and they therefore can sort of step in and say, “We’re doing it this way now; we’re going to use this blockchain structure and you’re all going to do it because that’s what we need.”

 I actually do think that some of these big players on the block—and sometimes they’re a development agency, sometimes they’re a company like Walmart or IBM—they’re the ones who are able to butt everybody’s heads together and say, “Come along, let’s do this together.”

Renato Because they have the scale, right?

Michael C. Yeah, they have the scale. They also have the incentive. They have people who care about what they say because they know that they’re the only game in town. Unfortunately, that’s the way the world works. I’d love to see it more organically emerge. Organizations like yours that sort of already have an existing decentralized structure within them may also be great places to bring about this because the incentives are already there to do it potentially.

 So, at the moment, a lot of the focus has been funded by enterprises—it’s an expensive exercise going about developing this tech—and so it’s coming through from, you know, the large Fortune 500 companies, and not all of them have the right incentive structure to push forward with their experimentation. But as this tech becomes more available, it becomes more standardized and cheaper, it might be organizations like yours—more distributed structures—that come along and say, “Let’s just employ it within our model.” You know, your payment systems across all these global barriers, in theory, should be much cheaper to manage.

Renato One of the challenges in our space is the fact that we have a lot of micro-transactions in multiple currencies, at times over 150 geographies, and you have to send $3 here, $7 there, $150…

Michael C. Oh God! I don’t know how much money is going into the hands of correspondent banks and all these others who are creaming off that process, but yeah…

Michael S. We actually did the episode on how to do that most efficiently for people in our industry; we did payment systems and it’s definitely a real need for our listeners.

Michael C. Well, it’s interesting, you know, in the developer community, partly because they’re obviously much more attuned—so maybe not the guys who are doing the translations but the ones who are writing the software—a lot of them are much more kind of crypto-savvy and open to blockchain solutions. It’s actually, in many cases—I don’t know how widespread, but it’s surprisingly large—that developers just do a deal and say, “Send me some Ether,” or, “Send me some Bitcoin,” whatever. And they do it, and they have ways to sort of hedge their bets because they might move in and out of dollars quickly, but they know that that’s much quicker and better for them. As they get the job done, there’s just the transfer of Bitcoin.

 There’s actually a lot more of this stuff going on. People say, “Why isn’t it being adopted?” because they think they’re going to see Bitcoin, you know, in the stores. It’s actually in that cross-border payment world, particularly around the world, that you get a lot of stuff happening when you just don’t even realize it.

 So, yeah, I mean, in theory, this stuff should be really good for the problem you just described. Particularly if we get to something that’s called a stable coin. So, there’s a lot of people working right now on ‘How do I create a Bitcoin that’s less volatile?’ So, it’s a token, a digital token that is pegged to some other source of value—let’s call it the dollar or the gold, or whatever—and you’ve got a mechanism behind that that’s constantly checking that. One is to have a reserve of cash that’s sitting behind it and it can be audited and proved that you hold that money. Another is an algorithmic process.

 These things are being perfected and figured out and I think the reserve model is the one that’s probably going to win. Nonetheless, we are getting close to this idea of a stable digital token that I can just zap across the world quickly and then convert back into fiat currency somewhere and know that it’s holding its value.

Michael S. So now, let’s go back to Robert Etches from Exfluency to see how this applies to the language services space.

Robert I can tell you how we’re going to use the token. Today, a freelancer does a translation and she’s subject to a CAT rebate from the LSP, and they’ve all agreed on a price, a word rate, and she gets a purchase order saying, ‘We’ll pay you X number of euro, or whatever, based on your CAT rebates and your word rate.’ And she does the translation, she sends it in and that’s the end of it.

 What we’re going to do at Exfluency is say, ‘Okay, anyone who uploads bilingual data, be it sentences or terminology, will be paid for these uploads in our token, in XFL. So, our version of Bitcoin.

 And there will be a limited number of XFL. I can’t tell you right now because it’s still a trade secret, but obviously first movers, they will be able to get more XFL for fewer uploads, and we call each of these uploads ‘linguistic assets.’ And the clever thing here is that we’re going to say once you upload, then these assets belong to the community. In other words, the LSP doesn’t own them, the end user doesn’t own them, you don’t own them; the community owns them.

 And we believe that companies, corporations, LSPs, freelancers, also amateurs will upload data to be a part of this community. We will then get people within the community to polish this data. So, if you upload, you’re a miner, you’ve mined the data, and then you vote on who can polish the data so that this data is of very high quality. We will then anonymize this data and use it to make NMT engines.

 Any profits made on the future flow from these NMT engines and work on them afterwards will go to the community. So, you get a more long-term return on your investment. Exfluency is only going to use your data to make NMT engines, and it will be NMT engines plus what we call ‘human enhancement’ that produces the final versions. There will be no CAT tools! There’s news for you.

 There will be no CAT tools, it’ll be NMT plus human enhancement. So, as a linguist, you will be paid for your data in XFL, in the token, and you’ll be paid for your services if you’re enhancing text after the initial NMT. You will be paid for that in fiat.

 There’s a new word as well for most of us: fiat means currencies like the dollar or the euro, whatever, that’s fiat currencies. So, you get a mixture of tokens and fiat currency.

Michael S. What is it that you get the fiat for, as a translator?

Robert For the enhancement.

Michael S. For enhancement, ok.

Robert For many years, we’ve all seen that you send a job as a customer to an LSP and you get one quality, but maybe you don’t need really, really good quality; maybe it’s okay with a B or a C. We have some experts involved who will be able to qualify the NMT version you get within a minute. And we’ll say, ‘Okay this is a B. Is that fit for purpose? Is that what you need as a customer?’ And if it is, you just pay for that, download it and off you go.

 But if you say, ‘No, no actually, a B’s not going to cut it here, we need an A++,’ then we will show you the top five options amongst the community within that vertical, with that language combination, with their trust chains, and they will show you how much it will cost to take your translation from a B to an A++. You make a peer-to-peer agreement with one of them and they do the work for you. And, if you create new linguistic assets during that process, we’ll even give you the buy-out of the translations in XFL.

Renato So, if I get it right, Exfluency is a marketplace.

Robert Yes.

Renato It’s a translation technology, it’s a bank in a way, it’s a trading floor, so you cover all the elements of the transaction from getting content in one language to another covered in this environment, and you can essentially syndicate or use multiple times the content that you have translated and be rewarded for that.

Robert Something along those lines. I’d like to emphasize we are *not* competing with LSPs. LSPs do a really important job—the whole process of project management and talking with clients and advising clients and setting text up—all that work, the whole long complicated workflows. We’re not interested.

 We’re looking at all the translation, all the texts that aren’t being translated that should be translated, because, for whatever reasons, the end customers think they can’t afford it. So, we want to be able to grow that 50-billion-dollar market to maybe 75 billion.

Renato So, Michael, we heard a lot from experts and people who were very interesting. Do you have a better sense of what we’re talking about?

Michael S. I do. Blockchain seems to be more clear, and one of the things that has me excited is they’re interested in the growth of our industry.

Renato Absolutely. So, one of the things that we haven’t discussed is that China is looking at blockchain in a different way. There is a company called LIC that is based in Singapore that has made a lot of progress in this space, too—somebody to watch. But, I have a sense that we’re still in the romantic phase of the blockchain experience.

Michael S. Mhm. So, for our listeners, it’s important to discern: are you listening to marketing material about blockchain, are you listening to technical advice about blockchain, and to continue to ask the questions, even if you are still grasping what it’s about. Continue to ask questions so it can become more and more real.

Renato And what I mean by the romantic phase is that like other community-driven technologies—like open source and wikis and things like that—they start in a romantic phase and then they become corporate initiatives. You have IBM and Red Hat with all their open source initiatives and so on. The other thing that we learned today is that there are some new words that are part of our vocabulary.

Michael S. Yeah. If you want to impress people at the cocktail parties, so they really think you know about blockchain, these are things you want to hold onto.

Renato The first being fiat. Fiat is not the Italian car, it’s a term that the blockchain community uses to define currency: money, dollars, euros, pesos, whatever currency you want to use.

Michael S. The second term that we heard today a great deal about is the ledger. It’s a new spin on the traditional forms we think of ledger; it’s a modern update that they use in blockchain. So, if you’re talking about the ledger, people will think you know what you’re talking about.

Renato And the third term is trust. Something that is the foundation for functioning of blockchain is this fact that data and content have intrinsic trust; it’s not trust that is bestowed by somebody else.

Michael S. Yes, it’s not by a corporation or by the government but it’s inherent in the system itself and the data that’s provided there.

Renato Very good. This was fun!

Michael S. All right. Well, enjoy the future with blockchain.

**End of conversation**