Interview: Blockchain and Digital Transformation in Financial Services

With Maryanne Morrow and Matthew Midson

Part II: Governance and Legal Issues, Future Opportunities, Development Needs and Research Pathways

"We are in a world now, where it shouldn't take two days to settle a securities or foreign exchange (FX) payment."

> Matthew Midson CEO, N. America, CPQi

This interview on "Blockchain and Digital Transformation in Financial Services" between 9th Gear Technologies, Inc., CPQi and the TIM Review took place on April 22nd and 29th, 2022. The interviewees were Maryanne Morrow, CEO, Founder, and Chairman of 9th Gear, and Matthew Midson, CEO, North America, CPQi. The interview was conducted by Gregory Sandstrom, Managing Editor, TIM Review.

Gregory: Who are some of the leaders in this field and how important is it that leaders in the financial services industry understand the importance of blockchain DLTs?

Maryanne: Well, let's look at the SEC as an example. It's really important that the government understands this technology. Gary Gensler, Chair of the SEC, taught classes on blockchain at MIT and before him Jay Clayton definitely understands the technology as do others like former CFTC Chair Chris Giancarlo (who is fondly referred to as Crypto Dad). It's critical that regulators understand it. Yellen has been parodied in a skit about NFTs on Saturday Night Live. It's not unusual for technology to be ahead of regulation. At least in the US, by watching the Maxine Waters chaired hearings on Robinhood and GameStop, it was very clear that some of Congress does not really understand how finance works. We now have Gensler in a spot where he really understands this stuff. And it's very different from how Congress treated the Internet where the regulatory framework focused on "do no harm". There's a lot of conversation about about how to regulate crypto. It's VERY different than the approach to the internet.

Gregory: I spoke with a Member of Parliament here in Canada recently, in regard to the crypto assets C-249 bill. She mentioned that two of the things that are getting people to start thinking about this sector now, that weren't before, at least in Canada, are the recent trucker convoy and online crypto crowdsupporting donations there, that led to the shutting down of bank accounts, and also the failure of QuadrigaCX. There was a film that just came out on that: "Trust no one. The Hunt for the Crypto King" (Netflix, 2022).

Maryanne: Mt. Gox in particular is an interesting episode that started with trading cards. The story is really interesting if you don't know about it. How it was one of the dominant ways of people moving value, using bitcoin and it worked well until a lot of coins were stolen. It was determined that they were operating without a money transmitter license and eventually lost what amounted to \$2.4 trillion in value.

Katie Haun was the lead prosecutor. She then joined Andreessen Horowitz as a VC, and now is out on her own. I'm so happy for her as a female to have raised over a billion dollars very quickly. She's amazing. So, that's an

interesting story that kind of transcends into some of these things where a lot of value vanishes. It has never been the technology that has been compromised but the onboarding on ramps and off ramps as well as human errors (for example, who has keys, etc.).

Gregory: Well, I think telling those stories is part of what this interview is for, that will become an article for the edition on blockchain to help get the word out.

Maryanne: Regarding digital transformation, it's important for people to understand the technology. But it's always critical that there is a business use case; that is paramount. ... I am going to utilize the best technology available, which is distributed ledger and I almost hate to even use the word "blockchain" because it just scares people. But, I am also orchestrating something using business as usual (BAU) pathways because "rip and replace" is a really tough thing for financial institutions and the reason why there are so many legacy systems.

Gregory: So, is it important for them to understand this stuff?

Maryanne: Yes, to a point somebody in their institution needs to understand how technology works deeply.

Gregory: So, it is not that everyone needs to know everything about all the pieces. I think that's a really important point, and then maybe the need for some kind of new distributed ledger literacy?

Maryanne: Education every day. That's what I spend most of my day doing is explaining how all this stuff works.

Gregory: I wanted to ask you again about decentralization. You addressed DeFi above, suggesting perhaps there isn't any because there have to be intermediaries. And "decentralization" doesn't necessarily mean an absence of centres, rather even more centres, while "distribution" means something different as well. What are we talking about regarding a "distributed ledger" for financial services?

Maryanne: I'm thinking about transactions that can't be in the public domain, they just can't. We're talking about working in the public domain versus working in the private domain. There are things that you just need

to obfuscate even in the public domain, but we're trying to make it easier and more efficient. As an example, when you apply for a business license, you can do things once and not have to put your Social Security out multiple times when it's not needed (for example, for somebody that's going to come in for food safety). They don't need to see that stuff, but you still need to do it once.

For us in financial markets, these transactions need to be obfuscated. You could have a regulator or an auditor command they come in after the fact and then look at things, and the way they operate, etc. Regulators watch the flow of transactions, then they put up policies, and fine you if you are in violation; that's usually after the transactions have occurred. Today, they are not part of these transactions. So, to have something where you can show a "single source of truth" and that we were all looking at this same thing, that's game changing.

You need to be able to verify things, and a single immutable source of truth is really important. I'm not in the DeFi world. I think that in the institutional finance world, DeFi is not appropriate. There are a lot of ways it doesn't work. There are still things to consider, as these networks develop and things are changing quickly. Will the legacy systems going to be a truism going forward? I don't know; that remains to be seen.

I still think that our world is based on sovereign governments backing fiat currency. And I'm building a product that can work today. We had to go through the red envelope phase of Netflix before we could stream and binge watch. Who's going to create the next Airbnb or Lyft using DLT? What I think is that some of these new pieces of technology can solve real world problems, make them more efficient and streamline things.

Employing this new technology is making it more efficient, more streamlined, and it's allowing companies to be able to be operationally so much more efficient. These are new types of technology, and even though it appears on the outside surface that banks are modern, they still operate in a primitive way. There is no need for that to be today, since there is technology that exists and we have been using technology in the banking system from the 1970s.

Gregory: It sounds like it's a combination of a network and a community. So, when we're looking at governance

and legal issues this goes together with finance, and with all the other spheres that are also trying to successfully apply these systems. It makes me wonder how. I call it a distributed ledger community.

Maryanne: Let's talk about that for a little bit. I think that there needs to be a private and public alliance, so to speak, on this. But that's really hard especially in some of these areas. ... Cryptographic technology is the way of the future. Even the regulators have said that. However, there is a turf war that's going on and it's not going to be pretty. There are multiple regulators here in the US governing financial markets and an equal number of those around the globe; it's a complex system. But we need to be able to have both public and private conversations in order to make it meaningful. The problem with consortiums and these types of conversations is that they don't move quickly, and the technology is so far out ahead of regulation.

That you are just starting to see some crypto regulation coming through, I mean, China has been ahead for many areas. They were the first ones to use paper money during the Tang dynasty (A.D. 618-907) and the first ones to implement paper money. And they also have said, they are not doing some of this crypto stuff anymore. Although the digital exchange of money still exists there, but they are not going to be doing it from a "crypto" perspective.

We're starting to see some governments around the world, say, El Salvador, make a go for it. But it will become more regulated, especially in certain areas like stablecoins and some of these other types of things. I think I'm anticipating some type of stablecoin regulation will be happening soon. But we're not there yet and I'm fascinated by what will happen.

Gregory: What else do governments need to do then? And then the flip side of that, what do they need to stay away from, like letting it out too fast, trying to have control over it? It sounds like there needs to be awareness raising campaigns of some kind.

Maryanne: It's very clear that regulators specifically in various countries, many of them do not understand money movement or how all that stuff flows. ... When you look at regulation as I mentioned before, it usually cleans stuff up after the fact that sometimes it takes 10 years for that regulation to appear. There will always be

a situation where technology is it's just so far ahead of where regulation is. I think that has happened in many cycles in our lives and it will continue to exist; it's just not in sync.

I like to see what's possible and what's going to happen with some of these new types of technologies. I find it fascinating to think what's going to happen and while we see NFT's you know, going for a ridiculous amount of money, I think that every piece of sand is unique. I'm just not going to pay any money for a piece of a pebble of sand where I'm not going to get any economic enjoyment out of anything. ... Why am I paying for some digital representation of something and why is that unique and what joy does that bring me? I do own crypto. I do own NFT's. I wanted to own it to see how I can physically effectuate a trend. I'm fascinated by how it works.

Gregory: How can private and public businesses, including banks, credit unions, insurance companies, hedge and pension funds benefit from the new FinTech landscape including distributed ledger blockchain networks?

Maryanne: FinTechs figure out a solution to a problem and then they go for it. We are very nimble, and we can duck and weave really quickly. So, large financial institutions can utilize FinTechs versus pumping tons of money into research and development. Sometimes there's something that can just be plugged in or something that can be taken and refined, or maybe repurposed for one of their utilizations to then rollout. I feel like that is a partnership to watch; watch them develop and form a relationship with them so that they can be embraced. And also I think applauded, because a lot of times when we start to interact with a financial institution, they are like, "Yeah, that's good, but it doesn't do this. It doesn't do that".

But behind the scenes, they haven't seen five years of my life of only focusing on this one thing. Usually it takes five years for you to become an expert at anything. I have put in my time, deeply understand it and am an expert in this space. Sometimes, when you look at what you're doing at an institution, you're only looking at one piece of it and not from the view of how would I change it if I started to do it from scratch. ... How do we eliminate risk? How do we become more efficient? So, partnering with them, embracing, and

forming a relationship with FinTechs I think is really important.

I do not believe that consortiums work very well. There are some exceptions to this statement. It's really hard for a consortium to operate effectively because you have 10 or sometimes 100 different views in a consortium. They all have unique needs, and sometimes they have competing needs. So, especially in financial markets, I believe FinTechs are the ones that will come up with something and then roll it out along with institutions.

I have one other comment that I have seen in the industry, where they have working groups. And let's say there's one that I would very much like to participate in and I think it would benefit them to have a company like ours participating with them. Yet, their group entry to join is \$60,000, and that is more than many people get paid as a yearly salary in a FinTech, likely a startup. If a consortium happens, they should be able to waive those working group participation fees for startups. Sometimes they do, sometimes they don't.

Gregory: Are you facing a lot of competition in what you're doing? Is it a blue ocean with lots of opportunities and partnerships in a global DeFi ecosystem?

Maryanne: Sitting here in Silicon Valley, I don't think that competition is a bad thing. I think that competition is welcomed. I'm game for it. Because if we have multiple people in the space, it is good. I think that it makes a better product just like if you look at how Napa modernized the wine world, all the winemakers have come together because they are able to find best practices and employ modernization to it. I'm a big wine collector and think about Napa modernized.

Gregory: Beverage economies of scale as well?

Maryanne: It allows them to produce better wine by all schooling on each other. ... It has changed the whole ecosystem. I think that the same thing happens when you have competition. There is so much blue ocean in this space. It has unlimited possibilities, and my problem is always how do I put guardrails on people because they say, "oh, we could do this, now we could do that". And I say back, it doesn't really matter what the vertical is; if it is digitized, we can put it through our system.

It's not just FX that we can move through our platform. We are opening the aperture: anything that is digitized can be put through our system. So, I think that there is so much opportunity and it is limitless as to what possibilities are in store for us in it. We are working to refine our strategy. As long as it's digitized, then it can come through our system.

Gregory: What advice would you have for these financial service companies or other companies that you service to help them overcome some of these hesitations that we talked about at the beginning, either experimenting with or adopting blockchain solutions?

Maryanne: Yeah, so one thing is that if you keep your head in the sand, you will be a dinosaur very soon. It's not a question of if, it's a question of when. ... Covid-19 has been a catalyst for change. Look at what the spend has been from financial institutions, they are becoming technology companies.

Because what is a bank? A bank is something that holds money and allows for money movement. Sometimes it's a credit component; they're doing loans and providing mortgages and things. Yet the real thing is that they control a shared ledger.

Going forward, banks are evolving, and there's this incredible shift as to what their utilitarian value is. If you do not embrace technology, you will die on the vine. Look at the amount of accounts that are being opened by new tech-driven banks; they have enormous numbers of new clients. Whereas some of the established institutions have taken 100 years to garner a certain number of accounts, new companies come and in five years eclipse them with the number of accounts that they've opened. So, the ability for a new player to enter financial markets and make somebody established irrelevant, that is happening every single day and it is not only in the Silicon Valley. The technology is readily adaptable anywhere. I can be anywhere in the world and create a new way of doing business, moving value. The way we transact is changing and people need to embrace this technology.

Gregory: Into the last official question here, it's about being entrepreneurial, entrepreneurship, and young tech entrepreneurs. You mentioned previously about the demand for people with backgrounds in

cryptographic methods. So, I wanted to also ask your advice for young technology entrepreneurs working on innovation and management who might be thinking about careers in blockchain, DLT, DeFi/ FinTech area field? What thoughts can you share with them?

Maryanne: First off, talk to as many people as you possibly can and form connections. That's my first thing always; form connections, don't be shy about it and learn the new technology. Every young person should know how to code. It's been a long time since I went to college, but I'm constantly taking classes at Stanford – recently 2 semesters on scaling blockchain.

Everybody should think about cross-functionally learning. It's more like a classical education that we used to think about in college. You learn a little bit about many subjects and you take a deep dive into one area or major. Everybody should be aware of some of this new technology and it's not just meetups in Silicon Valley. Through the power of videoconferencing, you can learn and absorb all kinds of information so easily now that it's almost like you're there. So, take advantage and avail yourself of these opportunities, learn about what is possible and who knows who's going to come up with a new Lyft, Uber, or Airbnb. We are so early with the distributed ledger technology. It is so nascent right now. It's exciting to watch what develops.

Gregory: I have one remaining question coming back to this idea some people have that technology is "evolving" and I was thinking together about bits that have been shared in this interview. You said, "banks are evolving" and then later you said the technology is "adaptable". So, the way it resonates with me is that there needs to be these trailblazers with new ideas making adaptations and innovations, and then others who are physically building an app. There's an inherent intention, and a purpose to app building. So, it's not just kind of in the biological sense of the environment putting pressure on people to innovate?

Maryanne: Sometimes when I look at creating, the first thing that I do is take something that I've done before, throw it out there and then rework it over and over again; you have to try and you have to put it on paper. I'm working in an area where I have familiarity, right? I've worked in institutional finance for a long time. I'm applying this technology to problems that need to be

solved. That's a critical component. But we have to experiment.

If I fail at this, I want to fail in a way that is an extreme way because I really went at it. I have no fear about anything involved with this startup. I'm going after it with courage and conviction because I feel that's what needs to happen. There are so many people in the world of finance that have really cushy jobs, and they know just little pieces of the impact of what they do. They're not really thinking for themselves and saying, "I've done it this way for many years. Is there a better way?" I mean, some people say like, "I wish this and I want that". I say: game on! Now is the time to solve these things. And let's go after this with gusto, having temerity in our push for it. Let's find out what needs to happen and what can be done.

Gregory: It's a proactive approach rather than just letting things happen?

Maryanne: I am a participant in this life. I am not a spectator. I want to try it all.

About the Authors

Maryanne brings more than 25 years as a corporate veteran in the financial, marketing and advertising industries to her role as founder and CEO of 9th Gear Technologies where she is responsible for leading corporate strategy, scaling the company and investor relations. She is a capital markets specialist, launching a family of mutual funds and architecting fee-based asset management platforms for banks, broker dealers and insurance firms. Maryanne previously served as CEO of SurgeXLR, a boutique accelerator she founded that focused on faster paths to monetization. She was also involved in two successful exits (to Standard & Poor's and BNP Paribas), and consulted on the custom content and advertising efforts of many financial firms while working at The Wall Street Journal. Maryanne is an active angel investor and an expert on distributed ledger technology, ICOs and cryptocurrency. Maryanne was educated at Cornell University (Material Science Engineering), LeMoyne (Finance) and Whittier Law School with continuous learning at Stanford University (Scaling Blockchain, Valuation Modeling, Angel Investing and part of the Blockchain Club).

Matt leads CPQi North American practice and is responsible for all aspects of the IT consulting business. Matt has over 29 years of combined industry and consulting experience in the Financial Services Industry. Prior to his more recent management consulting roles, Matt held long tenures in several large Global Banks (HSBC, Société Générale, Deutsche Bank, RBS), managing all aspects of Technology and Business focused heavily on Global Capital Markets and Global Banking sectors. Matt has a proven record in delivering business and technology strategies to support growth of business revenue plans, operational effectiveness initiatives, while balancing the demands of today's highly regulated environment. Matt's extensive financial services career originated from hands-on execution roles, through middle/upper management to an experienced CIO. His senior leadership roles have involved leading large diverse direct and non-direct teams in the Americas, Europe, and Asia.

Interview - Lessons Learned

1. Government and Legal Issues

• Finding the right use case is paramount in finance as in every other sector

• Distributed ledger solutions can lead to operational efficiency and streamlining of information processes for financial services

• There is a need for both Private and Public conversations and alliances, for example, involving the likelihood of a government-based fiat currency, and when could it come, so that regulations may advance alongside of the technology

2. Future Opportunities, Development Needs and Research Pathways

• FinTech companies are nimble; they can identify a problem and seek to build a solution for it, potentially in collaboration with large financial institutions

• Financial institutions are becoming technology companies

• More people should become aware of this new technology, not only for its impact on money and financial settlement, but on society as a whole

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