Peter Mantas on Ideas Driven by Innovation and Societal Tailwinds

Peter Mantas, General Partner of Logos LP, and John Mihaljevic, Chairman of MOI Global, recorded a fireside chat for Latticework 2021.

Peter and John explored the topic, “How Innovation and Societal Tailwinds Create Investment Opportunities”.

Companies mentioned include Planet Labs, Biodesix, IonQ, and Renalytix.

This conversation is available as an episode of “Discover Great Ideas” and “Gain Industry Insights”, member podcasts of MOI Global. (Learn how to access.)

The following transcript has been edited for space and clarity.

John Mihaljevic: I am delighted to welcome to Latticework 2021 Peter Mantas, a general partner at Toronto-based investment firm Logos LP. Peter is well-known to many in the MOI Global community because he has shared his wisdom and insights with members on several occasions. He has assorted business and financial experience with global institutions and holds degrees in both law and commerce. What has strongly impressed me about Peter is his views on technology, emerging technologies, and innovation and his ability to identify compelling investment themes as well as investment ideas.

At our conferences, Peter has presented multibagger ideas such as Zscaler. We’ve also had the pleasure to talk about some major tailwinds, such as quantum computing and biotech. I thought it would be fitting to invite Peter to join us at this year’s Latticework conference to talk about how innovation and societal tailwinds create investment opportunities. Welcome, Peter.

Peter Mantas: Thank you, John. It’s good to be here.

Mihaljevic: I thought we’d structure our conversation into three main buckets. First, we can talk about true innovation such as quantum AI and genomics. Secondly, we can touch on societal tailwinds – housing development, life sciences, communication, etc. Lastly, we can consider some other questions or topics. Let’s start with true innovation, how you think about it and what you’re finding particularly interesting in the major areas you’re looking at.

Mantas: Maybe I can even backtrack and talk about how we view innovation broadly. At a high level, I think one of the best ways to think about innovation is to think about the creative outputs a capitalistic economy creates. In looking for innovation or investments in innovation, we typically try to follow the Pareto principle or Price’s law. The Pareto law indicates that 90% of the output of any given organization is generated by 10% of the workforce. Those similar features – Pareto and Price’s law – are not bugs of capitalism. They lead to inequality, something capitalistic societies aren’t very good at solving, especially right now, but that is a feature of capitalism, and because of it, it’s a feature of innovation.

We try to look for companies within the respective verticals that exhibit Pareto principal

characteristics. You can realize that fairly quickly just at a high level. Once you've divided that out into the curve – the Pareto distribution relative to creative output – you can start diving deeper into the companies that might be the best positioned to win in their respective fields.

For example, if you look at the semiconductor industry, 80% of semiconductors are created and developed by the top 20% of chip makers. If you look at the top 20% of chip makers, about 90% is done by the top 10%. In GPU power, it's really Nvidia. It's the same as computing. Of global cloud computing, 85% or 90% is done by the top 10. You can see that with cloud right now. In cloud infrastructure, it's three companies – Google Cloud, AWS, and Azure.

What's hard about innovation or innovation investing is that there are many losers. There will be a lot of institutions or market actors that will be on the lower end of that curve and will not make it out in time.

If we look at something like quantum as an example, it is already experiencing a Pareto distribution – 90% of quantum power and qubit output right now is done by 10% of the companies, and it's essentially six companies. The industry is going to start forming in that way. The ones with the biggest leads will start to accelerate their advantages over time.

For example, going public is one advantage. This is what Pareto talks about where advantages start to compound over time. Going public is a major advantage, but it could be something simple. It could be access to the capital market or access to talent by partnering with a research university. Over time, as those things become more apparent and are strengthened, you get to see where the winners are.

Where it becomes problematic is more dependent on the market you're in. This is where rigor analysis is required – qualitatively and quantitatively. It's about (a) what kind of price you're paying for those leading in the distribution or the ones that may come up and also enter in the top 10% and (b) whether that distribution is static in any way. If we look at smartphones, not too long ago, Apple was not in the top 10% of this market. One has to be a bit more rigorous in terms of their analysis, but typically, that's how we view innovation. At the end of the day, innovation or investing in innovation is about identifying the creative outputs that will drive the economy. If you're dealing with such outputs, they will all fall under Pareto distribution – all of them. That usually is a good start when looking for innovation.

I'll give you more recent examples. Take the Metaverse. If this truly becomes a large industry, you're already seeing who might win there. Facebook will probably be there as well as Unity and Epic, which are already a duopoly. Maybe Microsoft and Google. Another challenger that we don't know yet might come in. Within the Metaverse, there's a various number of potential other outputs, derivative outputs, and various verticals.

The main idea is that when we look at innovation, it's a function at a high level, looking at the Pareto principle and identifying from there the qualitative and quantitative aspects that might lead to more fruitful investment.

Mihaljevic: Let's delve into each of the three main areas. We recently did a call on quantum. Could you share your latest view on how that's evolving and whether anything has changed since we spoke?

Mantas: Quantum is an interesting vertical because it's so, so early. Strides are being made

every day getting it closer to being a reality, and it is a reality to a degree, but having a truly functional error-free computer that's better than the best supercomputers is still a little off. However, the advantages being created within the quantum framework are starting to compound fairly rapidly. Within quantum, there's a number of ways that one can achieve functional quantum computing with low-error and great fidelity. Certain methods are better than others.

I'd say the quantum industry is very akin to the semiconductor industry. You're going to have the Texas Instruments of the semiconductor industry, the Intels, and then the Nvidias, which are higher-powered, higher-end chips. It's the same with quantum. There's going to be ion trap quantum methods. There's going to be cold atoms and various kinds of ion traps, for example, what Honeywell is doing. There are going to be superconductor methods. It's more of a function of diving deep into each one and understanding where each one will play in the global economy.

If anything will fall under a Pareto distribution, it will be quantum because it's extremely difficult to develop a quantum computer and very costly to attract talent. There are only so many quantum physicists in the United States or globally and only so many universities with the capacity to have that kind of research done at a decent level. There are only so many governments that have proper grant initiatives or programs to allow for research in quantum. It will play out over time, but it's still quite early in its journey.

Right now, IonQ is the only public quantum. I believe Honeywell spun out a division which is in quantum through a merger with Cambridge Quantum. That might go public next year. I think Rigetti is going public next year. You'll have a few coming out as well, but it's still quite early in its phase. I guess the best way to think about the industry is as almost akin to the semiconductor industry.

Mihaljevic: In terms of AI, I feel like it's a bit connected to quantum or will clearly benefit from that tailwind. How are you thinking about the impact of AI? To what extent do you see it as investable?

Mantas: You're right. AI is very tied to quantum. At some point in the future, quantum will provide better AI. There are two ways to think about playing with AI. Inherently, an algorithm isn't worth anything. What's worth is the data. Google owns a lot of data, and a recent de-SPAC, Planet Labs, has 100 times the data of its nearest competitor in terms of images of the earth. It's certainly one way to do it. What are the data plays for that? The second is what companies are leading the charge in machine learning.

You could look at companies in certain verticals. Every organization will have AI capabilities in its software or its solutions. For example, Bentley Systems, which does infrastructure software, uses AI for identifying certain cracks in foundations and things like that. Google uses AI for certain workflows. Microsoft will have an AI component for its own cloud computing. It's extremely difficult to pick out an AI company. It's more what verticals you think AI would benefit the most and which ones already have the lead in AI.

I don't see why Microsoft wouldn't be a leader in AI in the computing world over the next 10 years. I don't see why people wouldn't have an establishment in AI there as well. I also don't see why certain other potential cloud vendors might use AI in either infrastructure, monitoring, or things of that nature. AI is a harder one because it's more the tools used to create better products or services rather than someone owning AI as an industry. That's how I would view AI in that respect. It's something that all companies are working on and will

have a need for in the respective services they provide to customers.

Mihaljevic: It sounds like you don't believe in a generalized AI where basically only the biggest companies with the biggest AI R&D budgets would be able to compete. You see it as more broadly distributed.

Mantas: Yes, I think it does depends on the kinds of AI workflows we're talking about. For example, AI in the healthcare or bioinformatics sectors will look quite different from the AI for computing workflows, for DevOps, for data infrastructure, or for reliability or observability. All these providers do have AI as a solution to better their services.

I think the big incumbents will be pretty well versed in AI. They're going to make strong efforts in AI. Microsoft is going to be a leader in cloud computing and any AI workflows. Even if another competitor comes around for a certain application which is more AI-focused, is Microsoft's cheaper bundle is going to be good enough? It's more of a tool within these vertical sectors rather than this company is a leader in AI. At the end of the day, it's just an algorithm. What matters is the data. The one that has or controls the data will be a valuable company. The tools or the algorithms used for AI may be sufficiently complex, but I don't see any clear leader other than whoever is in computing.

Quantum may enter and make AI sort of super AI. That is more a function of the vertical where quantum is rather than the AI market, so to speak. There might be different verticals within AI, for example, the basic useful AI you have today all the way up to super complicated AI. Other companies we don't know yet might also operate there in the future, but I'd be surprised if large incumbents don't already trap those basic algorithms to provide those solutions to their customers.

Mihaljevic: Do you see any existential threats to humans from AI, or is that science fiction?

Mantas: Interesting question. I think it's a bit too early for that. If there was to be anything, I don't think it'd be in our lifetime. It certainly is possible. I know Elon Musk has talked about this at some point, and some others have sounded the alarm about the future of AI. What solutions will be used as the brains of a robotics company creating lifelike robots certainly is something almost Terminator-esque, but we're still very far off from that happening, in my opinion. Right now, I don't think we're in a position to properly assess any real risks.

Mihaljevic: Touching on another vector of true innovation – genomics. Help us understand that a little better.

Mantas: Biotechnology in general is going through an interesting period. I just wrote a study indicating that it's getting increasingly expensive to create a drug, and the peak sale of that drug is declining. Not only are companies spending more to develop a drug, but the fruits of their labor aren't as long-lasting as they think.

There are companies out there using AI, for example, biosimulation of clinical trials or virtualization of trials. There's a company called Flutura, which is, I think, owned by EQT Partners or a big chunk of it is anyway. Imagine taking the risk out of doing a clinical trial by having an AI machine learning platform that mimics the human body and what reactions humans will have pertaining to the chemistry or the organic compounds that interact with human biology. That reduces the risk in biotechnology and makes businesses better.

Companies like Schrodinger do physics-based simulation. What would it look like when certain molecules interact with each other over a particular time frame or in a particular

compound? What would that feel like? How would that interact?

There are a few simulations in this space that do help pharmaceutical companies reserve the cost for the genomics or even biotechnology costs. There's synthetic biology, which is something quite fruitful and looks highly promising. It helps in getting a vaccine very quickly and is real. There are certainly some innovations under the radar creating an interesting tailwind. The first would be biotech companies that become platform companies. Imagine you have a CAR T-cell therapy company, which is basically gene therapy for certain kinds of T-cells for autoimmune disease. Why have one disease when you can have a number of diseases and potentially viruses, or an antiviral or vaccine that helps a number of diseases in oncology, like neck cancer, throat cancer, and HPV?

You'll start seeing companies have platforms in their biotechnological processes. They may use other things to assist them in reducing the cost of that process. The biggest risks in biotechnology or genomics are the regulatory aspects. Even picks-and-shovels companies like West Pharmaceutical, Thermo Fisher, Danaher, and Repligen are extremely innovative in their processes, solutions, and services.

For example, West Pharmaceuticals has one of the most complex supply chains in the biotech space. The company can deliver 40 billion components a year. To do this, you need to have pretty outstanding computers and technology to fill that supply chain and provide a needed service to biotechnology. People think of West Pharmaceuticals as a syringe company, but it's more than that. There's innovation we don't see going on in genomics and biotechnology, and I believe it will lead to a biotechnology renaissance.

The Pareto principle applies to that. If we look at simulation software, 90% of it is done by 10% of certain software providers, five of them, in fact. If you look in the biotech industry, 80% of the research done goes through Charles River Labs. West Pharmaceuticals is responsible for 70% of the global packaging and delivery in the syringe market, and 80% of the infrastructure provided to healthcare companies is from Thermo Fisher and Danaher.

The Pareto principle is already applying to those technologies and innovations, but there are things going on under the surface that will lead to a very interesting next 10 years in biotech and genomics. Synthetic biology is one, but there might be other things that deal with longevity or oncology and certain immunotherapies.

For example, we haven't seen a treatment for brain cancer in 20 years. The currently available treatment is for one kind of brain cancer. As of 2021, there are already a few candidates in the market, I wouldn't say for curing but for extending the life of patients with other kinds of brain cancers. There are companies that also assist in drug delivery to the blood brain barrier. There are some innovations happening under the surface that will play out in genomics and biotech, and they are so vast. It doesn't have to be just genomics. It could be many verticals within genomics in the biotech landscape.

Mihaljevic: Generally speaking, it seems that stock prices have underperformed in the sector. Where are you finding the most interesting risk rewards?

Mantas: There are two things. I haven't seen this wide of a gap before between big cap – or big cap tech even – and biotech small cap. The SPI underperformance to the QQQ has been an absolute anomaly. There are reasons for that, but I haven't seen it this bad even in the innovative companies that have sold off.

It could be for a number of reasons. It could be emerging market risk or a legitimate company that destocked and grouped with the other stocks. It's hard for me to name sectors because everything is situational, but healthcare, some verticals in biotechnology, certain companies, and medical technology are sectors where the valuations are starting to not make sense. Even in some of the de-SPAC you're getting low single digit valuations and price next year sales, next year revenues, even three-year EBITs, some of them have EBITDA-positive or gross margin levels that are high. Some are trading under one time next year's revenues.

Things that have been hit in healthcare because biotech catalysts are at nine-year lows. There hadn't been an FDA head for nine months before Biden appointed one a couple of months ago. There's obviously recession risk. The yield curves are flattening. People are panicking that there's going to be an immense amount of tapering, and if there's an immense amount of tapering in a period of potential deflation, that's not great. That sells off the entire group. Then there's small-cap or mid-cap companies in a variety of sectors that could be undervalued based on future cashflows. Some things remain deservedly expensive even after a 50% or 60% drawdown, but as of now, I'd say there is some real value going on in some of these smaller-cap companies that are getting crushed.

Those are the areas I will be looking at. It's hard for me to paint a broad stroke and say this entire sector is cheap. Biotech in general is at almost nine-year lows in terms of valuation, multiples, and the number of stocks trading below cash, but there are some expensive companies within that sector as well.

Mihaljevic: Among the names you've mentioned in the past are Biodesix, Bluebird Bio, and Renalytix. Do any of those strike you as particularly interesting to take a look at?

Mantas: Biodesix is interesting. It got hit tremendously for a few reasons. The first is building out a sales team. The second is that all the pulmonologists have been closed due to Omicron and the number of variants of COVID. The business is meant to test in the pulmonology channel, in the clinician channel. With this constrained, the stock price starts to go down, not to mention that it's fairly illiquid as well. We think Renalytix is an interesting one at these levels. It may continue to sell at some point. The company leverages AI to serve the solution it provides.

It's more about what kinds of catalysts we can see in the future and what price we can pay for them. Biodesix is currently trading at two times revenue. Even if we back out COVID tests, look at a pulmonology channel and assume the company hits its salesforce infrastructure, then we talk about pretty substantial returns over the next five years, let's say. Renalytix is the same thing. It got a government contract this year. It's being rolled out to Mount Sinai Hospital, and various hospitals are signing up partnerships with companies like Baird. I believe that might be coming up soon. It's all relative on the valuation. What does the future cash flow look like? What does the future revenue growth look like to the price you're paying today? Those are a bit more attractive.

The gene therapy stocks can be hit or miss. Bluebird spun off one of its divisions, and it's going through a bit more of a transformation, which will be tough for shareholders for a while. However, the places I'd be looking at are more in that space where they were impacted by COVID or by a certain kind of channel when the stock price declines and the valuation isn't demanding.

Another one is ClearPoint Neuro, where 90% of revenues currently are in the operating room.

It is obviously going to be impacted by COVID and also by the lack of biotech catalysts because it has a number of partners where it delivers drugs in the blood brain barrier. I believe the stock is down 60% to 70%, but if you look at the analysis – like the laser business alone – if you stop at the 12 times multiple on next year's revenue, it's not that expensive. Competitors like Intuitive Surgical or Edwards Lifesciences are trading at 13 to 23 times this year's revenue, so there's value there.

It may require patience. Everything requires patience, but we're now getting to a point in the market where valuations are bordering on irrational, and the spread between large caps and small caps is getting too wide. There will be returns made from things that haven't been dealt with in biotech or in some of these de-SPACs. There will be winners. It's about going through the ones that – quantitatively and qualitatively – might come out of this unscathed and see growth over the next little while.

Mihaljevic: Let's switch gears and talk about the second big bucket here – societal tailwinds and the opportunities they are creating. What are some of the major tailwinds you're seeing and how are you looking for opportunities?

Mantas: I think life science is very interesting. Coming out of COVID, we'll start seeing more importance placed on the infrastructure of healthcare. I believe companies like West Pharmaceuticals and Thermo Fisher will continue to outperform. Those tailwinds won't go anywhere. They're going to be almost too big to fail given the pain and suffering people have gone through with COVID. We're talking about a virus that isn't Ebola. It's not great, but it's not the worst thing either.

I think we're going to look back at this almost like 9/11, where we say, "What does defense look like? What does our national security look like? What does the world look like coming out of COVID? What is the importance of health and supply chain?"

The sustainability of the economies is going to be a major challenge. I don't necessarily mean ESG. There is certainly ESG and hitting ESG targets, but I mean creating more of a sustainable economy using large datasets. For example, Planet Labs has over 200 satellites floating in space. In fact, half of all satellites in the world right now belong to Planet Labs and SpaceX. Through Planet Labs, you can identify the soy crop yields for every farm in the world, whether or when they require water, the biomass for some crops, the methane being exuded from certain cattle farms, or the carbon density of trees in the Amazon rainforest. This information is valuable for mining companies, governments, consumer-packaged goods, agriculture companies, finance, and insurance. Big data and its use case for sustainability will be a major tailwind. That information will be invaluable for actions in the future.

Housing development will definitely be something. The population is growing and getting older. People want more space. If we're having a hybrid work environment, people would like more homes. There are also the emerging markets. I'm not talking just about Asia but also Africa. Not many people talk about this. I read a UN study the other day on how poverty in Africa has dropped drastically since 2000. As these people enter into the middle class, they're going to need solutions. They're going through a bit of a renaissance as well.

Those are the major tailwinds I see. We can also talk about some headwinds, for example, declining birth rate and infertility. These things are also pretty important and need to eventually be solved for the good of the economy. I would say the sustainability piece and the life science infrastructure are going to be essential coming out of COVID. If we look at North America, it's big data, housing, and using more sustainable approaches to do

packaging and providing services and solutions to customers.

Mihaljevic: Since you mentioned Planet Labs, there's another de-SPAC in that space, Spire Global (ticker SPIR). If anyone's going to look at Planet Labs, it may be worth taking a look at Spire as well. I happen to know the CEO, who has attended our St. Moritz event in the past. The company has executed pretty well, but it seems like the market is still very nascent. Spire is losing quite a bit of money. It's somewhat of a scary income statement, but if you believe in the opportunity and that there's valuable data to be delivered from space at some point, those companies could start creating real value.

Mantas: Yes, it's interesting. It's one of those things that I would say is similar to quantum, but you already are starting to see the Pareto distribution there as well – 80% or 90% of the satellites are going to be owned by 20% of the companies. Also, it's not cheap to launch satellites. You need several hundred satellites circling the world, mission control, and process systems engineers. Good luck attracting talent from national space agencies. These are the only people who can figure this out.

It's a fascinating area. There will be winners, but it's still quite nascent. Nevertheless, you can start to see the business models slowly form. It's going to be a function of which companies currently have the advantages, which have the most comprehensive amount of data, and which attract the best talent. Once those start to spiral out, like any Pareto distribution, you'll start to see winners and losers.

Mihaljevic: Can you elaborate on the opportunity you see in housing development? What's particularly interesting there?

Mantas: I can speak for Canada. Part of the problem in housing in the Canadian context is supply. There are not enough homes for the level of immigration coming in and for the family formation going on in the country. Unlike the United States, where a large part of the country is livable, in Canada, only a certain amount of land is livable.

If the United States and Canada open their borders to more immigration, and people demand more space – because we are working from home and don't need to be close to the bigger cities anymore – there's going to be an actual demand for housing, particularly detached housing, and the kind of space required for humanity to sprawl into different communities. That's put some pressure on the building material commodities – like lumber, which has done very well this year – and that probably will continue over time. There will be also the need for renting and rentals.

The increase in family formation is necessary. It should drive the supply of homes, but housing development in Canada is regulated by the government. There are areas where you can build and certain permissions required, and there is an economic cost to not having proper housing for any given economy. If housing is too expensive, people will take less risk. They won't start a business or take a job at a startup. They may not spend more on discretionary goods. They may not take a vacation. They may not have enough for retirement. Having such short supply of housing in general is not a good thing. If one believes that more homes will be built – and they should be built because we need them – then that's certainly a good tailwind to ride on.

Mihaljevic: Let's talk some more about emerging markets. You mentioned Africa, which is very rich in natural resources. It seems like it's also becoming a bit of a geopolitical playing field for China and, as always, the US. What's changing in Africa to make you believe it will be

fertile ground for investment as opposed to the past when I'm not sure you could have invested very well as a Western-based investor?

Mantas: It's still very difficult in Africa. I think what's made strides is the income level, which has gone up quite a bit in the last 20 years. The quality of life has gone up over the last 40 years. Companies are starting to open up. Google opened up in Kenya. There are quite a few large industrial companies in Nigeria. I believe there's another tech giant looking at Africa.

There is also the proliferation of communication devices. For example, WhatsApp is an effective utility in emerging markets. It's something important for Africa and Asia in terms of communication and payments as well. The proliferation of digital and virtual banking and ease of payments into Africa will be certainly awaited to invest.

It's hard to say. I don't know what the correct way to invest in Africa is. For example, Sea Limited, which is the backbone of the emerging market e-commerce sector, might make a push into Africa, but I think it's still a little early to invest in a purely Africa-centric company. I'm sure corporate giants like MasterCard, Google, Facebook, and Microsoft will start investing more in that area than what we've seen previously.

Mihaljevic: Let's wrap things up with our third bucket – other considerations. Anything in particular on your mind?

Mantas: The big takeaway is that at the end of the day, what matters is not only defining winners but also paying a good price for those wanting to invest in this sector. It's very difficult to figure out exactly what the proper price is. Are investments made today by companies that are losing money flash in the pan, money-burning ventures or durable moats over a period of time? What kind of intangibles does one need to look at to have a better glimpse as to what the future might hold for a particular company? Are these intangibles truly valuable? Are they creating moats or are they just a waste of time?

When going down the innovation spectrum, it will be like a Pareto distribution in every single vertical, whether it's quantum, genomics, or the space race. Once you realize that and can parse the companies which are already in the lead or may become leaders, as you dive deeper into the qualities, it's about making sure that you pay the right price. That's harder than one can figure out, but if you pay a good price, you'll be rewarded.

About the featured guest:

Peter Mantas serves as a general partner of Toronto-based investment firm Logos LP. Peter has an assortment of business and financial experience at global institutions. Peter's prior experience includes senior managerial roles at large information service and enterprise technology companies in addition to legal experience within the capital markets, alternative investments and tax groups at McCarthy Tetrault LLP. Peter has also been involved in a variety of private equity transactions, ranging from retail to renewable energy, in addition to leading a proprietary trading team for a boutique desk. Prior to this, he held various economic research positions at the Export Development Bank of Canada, Statistics Canada and other various federal government departments. Peter has both an LL.B. and B.C.L. from McGill University's Faculty of Law. Prior to studying law he obtained an Honours Baccalaureate in Commerce, Magna Cum Laude, from the University of Ottawa, Telfer School of Management, where he received several awards of excellence.

About the session host:

John Mihaljevic leads MOI Global and serves as managing editor of *The Manual of Ideas*. He managed a private partnership, Mihaljevic Partners LP, from 2005-2016. John is a winner of the Value Investors Club's prize for best investment idea. He is a trained capital allocator, having studied under Yale University Chief Investment Officer David Swensen and served as Research Assistant to Nobel Laureate James Tobin. John holds a BA in Economics, *summa cum laude*, from Yale and is a CFA charterholder.