

Musings of a Long Time Long

Let me first start by saying, as I have said here before, that I am a 19 year shareholder (first stock purchase was in 2002 at \$12 - which is actually $\$12 \times 8 = \96 dollars today, due to the 1 for 8 reverse split in 2012). I never sold a single share for the first 18 and 3/4 years. I have sold 20% of my stake over the past 3 months. Not because I have lost faith in the Microvision investment, but rather simply because it became the responsible financial thing to do. Having said that, I still hold 80%, and will acquire more shares if the right opportunity presents itself.

Through the next few paragraphs, I will attempt to explain where I think Microvision is, not so much in regard to their technical/product/business journey per se, but rather their valuation. The major premise of this writing, is that the stock price (valuation) is not the company and the company is not the stock price. In order to make my point, I first need to take the reader through an historical journey.

Like many long time longs, I have always believed in the value of the technology. I saw it as a platform technology early on, not even knowing it would apply to the LiDAR realm many years in the future. Mini projectors were the initial attraction, putting a projector in a cell phone was the initial holy grail. But then there was the Flix bar code scanner; the light based telecommunications idea (which ultimately was spun off with the Lumera IPO); the Nomad personal display system. The Nomad was a monochrome (red) head worn retinal scan display device. To me, this was really huge. The device would revolutionize the service industry. Honda was purportedly going to buy many thousands of these devices to support their technicians worldwide. Although, the devices were going to be rather expensive, it was a no-brainer, as the productivity gains would quickly pay back the initial investment. All of these things occurred prior to 2005.

During this time, Microvision was led by then CEO, Rick Rutkowski. I have never met Rick. But I do know that under his leadership, there was seemingly a press release every week. It was an exciting time, and as a shareholder, all the updates were very encouraging. In hindsight, it seems many of these flowery updates painted a picture that was not as close to reality as we wanted to believe. Rick was articulate and a good promoter of the company, but the issue was that the technology and perhaps the overall infrastructure (wireless speeds, mobile phone technology, green lasers, software, etc.) was not there yet. As a shareholder, we didn't realize this. We thought that the ability to generate revenue from our technology was just around the corner. I say "thought" because I don't believe we were ever explicitly told that revenue was just around the corner, it just seemed that way.

The BoD perhaps recognized that Rick was not the right leader to take Microvision forward. In August of 2005, they hired Alexander Tokman from GE Medical as the COO. Alex was a seasoned veteran with high credibility from one of the most respected companies in the world. Alex was appointed President and CEO by January, 2006. Frankly, regardless of how good or bad Rick was, the company needed a leadership change. We needed a new leader who could regain the trust of the shareholder and take the company forward.

As many new CEOs do, Alex planned to refocus the company. We were going to scrap many of the ideas and focus on one core mission moving forward. Ultimately, this mission was to embed a projector in a

cell phone. Just as cameras became ubiquitous within cell phones, so too would projectors - and Microvision had the only technology that could succeed in this task. The numbers were mind boggling. If we could penetrate just a small percentage of the smart phone market, we would have an incredible business. The estimates were that 1 billion smart phones would be sold every year in the not too distant future (this actually happened in 2013 - this number is actually ~1.5 billion today). By penetrating just 5% of this market would literally mean billions of dollars of annual revenue for Microvision. Ok, good plan - let's go!

There was a different PR cadence coming from Microvision. No longer did they issue a press release when they formed a partnership with the local Subway for their employees to get discount on a tuna sub. Ok, I kid. But while the PRs became less frequent, they seemed to be more meaningful. This was a good thing. They were not just talking about stuff, but now they were busily working on stuff and communicating to us when certain achievements were made. And they had a seasoned, GE veteran at the helm! Things were looking good and we trusted in Alex!

At this time, both red (remember the Nomad) and blue lasers (thank you Blu-ray players), were available and economical. But the "pesky" green lasers were not yet available or economical to make an embedded projector viable for a cell phone. Enter Corning - the famous glass company headquartered in Corning, NY. It seems they had moved on from their CorningWare cookware that was a staple in your grandmother's kitchen, and pivoted towards materials science areas like advanced optics, specialty glass (Gorilla Glass for iPhones), ceramics and others areas such as lasers. Corning was designing, developing, and investing in what were dubbed synthetic green lasers. They were called synthetic because they were actually infrared lasers which were manipulated to generate the correct wavelength to produce green. These synthetic green lasers were simply going to be a stop-gap until native green lasers could be invented.

Well, as it turns out the development of native green lasers advanced more quickly than Corning had predicted. They originally thought it would take 5 years, but advances in that area put it more like 2 to 3 years away. The lifespan of the synthetic green laser was no longer going to allow a return on investment. The micro projector market, via Microvision, was really driving the large investment being made by Corning. That should tell you how large Corning thought the market was for this type of product. By 2010, the synthetic green laser was dead in the water, and Microvision's path to profitability was extended by 3+ years overnight! There would be more dilution, at lower stock prices. This ultimately led to a 8 for 1 reverse stock split in 2012. We needed to maintain our Nasdaq Capital Markets listing.

We trusted in Alex, and perhaps due to things outside of his control, that trust was diminished. But to Alex's credit, he continued on and navigated some very tough waters for many years. Then we signed a large deal with a Tier 1 technology company in April of 2017 (we know this to be Microsoft today). However, due to an NDA, Microvision is not allowed to speak their name. Furthermore, it is my personal belief that the financials of this deal are not necessarily great for Microvision. To be fair, the deal provided Microvision with \$10M in cash up front and the ability to generate another \$15M in cash over the relative near term for Non Recurring Engineering (NRE) work. Remember, during this time, cash was king at Microvision, it meant less dilution. In any event, I am of the opinion, that the April 2017 deal

is what ultimately cost Alex his job. I have no facts to back this up, it is only my opinion. However, I attended the 2017 ASM (this occurred in June) in person and did detect what I thought was a palpable tension between Brian Turner (Chairman of the Board) and Alex. I didn't think too much of this. I could have been a bad day for either or both of them, who knows. But, when Alex was replaced (and I say replaced vs. resigned as that is what it seemed like) in November 2017 I recalled the tension I observed in the ASM meeting months before, and thought it was more curious. Most likely it was not one thing that contributed to Alex's removal.

Let me divert a bit here, and tell a side story. During the 2017 ASM I asked a question during the Q&A session. I asked if Microvision was planning to communicate their tremendous story to the larger world. I referenced the fact that I thought no one wanted to go back to the Rick Rutkowski days where there were PRs published for trivial things. But the shareholders believe the story is a great one, as does Microvision, so why not invest in better communicating that story to the larger public. Brian answered first, and stated that they are not marketing to the retail world, but rather to a limited set of large companies who would purchase their product to use in the ultimate end product. The Intel Inside approach - think Apple, Samsung, Amazon, Google, etc. I knew they were not trying to build the end product themselves and were not marketing the end product to the retail public. For instance, the ShowWX pico-projector, which Microvision produced, was not a product that Microvision wanted to ultimately produce themselves, it was simply a showcase product to demonstrate that their pico-projector engine works. Alex articulated that concept very well over the years. I clarified my question, by saying, I completely understand and agree with the overall business approach. But what about getting the story out? Alex jumped in and answered the question in exactly the same way Brian answered it. Needless to say, I was disappointed. It was amazing to me, that a company who needed to sell equity to stay alive, was not willing to promote their fantastic story, which would theoretically increase the value of their stock and minimize the future dilution which they would surely need. Of course they promoted their story to a degree, but in my opinion this was not a great focus for them. Certainly, not high enough on their list for my liking. I will come back to this later.

At any rate, Alex had lost the trust, certainly of the BoD. Perry Mulligan was named CEO in November 2017. I thought this was a bit of an odd replacement. But given the cash issues facing Microvision, perhaps they did not want to spend the time and money to do a time consuming expensive CEO search. Perhaps Perry lobbied hard for the job. He was a 7 year BoD member and presumably knew the company and could hit the ground running. He had a supply chain background and presumably that was important for this phase of the company. The impression given was they needed to move quickly. Perry was going to refocus the company on winning a large customer, not just furthering the technology for the sake of it. Also, after the synthetic green laser issue, Alex might have spent too much time working with smaller companies on numerous projects. At least that was the impression I got. Perry gave the impression he would not waste time with the smaller company's but rather wanted to hook the big fish and would basically be casting all the Microvision's fishing lines in that direction.

And in 2019 a very large customer was on the hook; a whale of sorts - let's call him Moby Dick. And bringing that \$100M whale in to the boat was forecast, initially for the end of the year 2019. That slipped a bit, but have no worry. Moby Dick was still on the line, it would just take a little more time to reel him in to the boat. He was a big one! And then, all of a sudden the line snapped!!! The whale was

gone. There was some quasi blame that COVID might have contributed to him getting away. But that is not definitive. There was some credible speculation that Moby Dick was actually Amazon and the product was a version of the Echo smart speaker that would incorporate the Microvision Interactive Display projector engine. If it was Amazon, it would not surprise me if that whale was simply toying with Captain Ahab Mulligan, and knew he could bite off Mulligan's leg whenever he wanted to. I've had first hand experience with that whale myself.

Now the trust for Mulligan was gone. He promised to deliver the whale. The whale got away. Next up, Sumit Sharma. Sumit had a reputable CV. Prior experience at Google. An accomplished engineer. But no experience as a CEO. This would be a make or break opportunity for Sumit. How would he handle it? What would he do? Microvision was literally on its last legs.

He immediately cut the workforce by 60%; the only remaining employees were 3 executives and 27 engineers. He articulates we are seeking a strategic alternative (code name for sale of all or part of the company). He says the company's future is in automotive LiDAR. Wait what? What about the AR vertical? What about the Interactive Display vertical that almost landed Moby Dick? Heck, what about the cell phone (Display Only) vertical? Is that concept just completely gone now? He recognized the power of the Microvision retail investors, which owned a considerable percentage of Microvision stock, and their band of merry men on the subreddit MVIS. He organized a Fireside Chat with a handful of those redditors and pitched his message, and listened. He needed them, and they needed him. He acknowledged that the trust between Microvision management and the shareholder was severely damaged and wanted to earn that trust back. Oh, and that comment about automotive LiDAR being key to Microvision's future - well that turned out to be spot on - TRUST 1 - DOUBT 0

He explained that the number one near term priority was to remain as a listed company on the Nasdaq Global Market, as this would be important from a negotiating perspective. In order to remain listed, Microvision would need to execute a reverse split. Now, if there is one thing that the Microvision retail shareholders despise, it is a reverse split. You might as well cut one of their arms off, before they would agree to a reverse split. Pink sheets be damned, we don't care. Read my lips, NO REVERSE SPLIT - under no circumstances. Well, at the 2020 ASM in May, the vote FOR a reverse split was passed, largely with the support of the Reddit retail shareholders. Hey, this guy Sumit is pretty good. He navigated some troubled waters and articulated the mission and sold the support for that mission. He and Steve Holt both articulated that if the reverse split was not needed, they would not execute it. That is, if the stock price remained above \$1 for 10 consecutive trading days Microvision would no longer be threatened with being delisted from the Nasdaq. Sure enough, in June that is what happened. Now, the reverse split approval had an expiration date and if that date was hit, the BoD could no longer execute it. Would Sumit live up to his word? He did. TRUST 2 - DOUBT 0

The Fireside Chats provided an air of transparency. In reality, and in accordance with Reg FD, material information that is not already public, cannot be disclosed in such meetings. And having participated in FC2 and FC3 I can tell you that rule was followed. But, I believe these meetings provided some reassurance that things were real. Microvision was telling the truth. Sumit even said early on that there was no guarantee that they would not come back to the shareholders and ask for the approval for the creation of additional shares (the available share pool was almost exhausted at this point). Sure enough,

that is what happened. Another public debate ensued. Initially, Microvision was seeking an additional 100M shares, this created much angst. Why so many shares? Frankly, why do we need any shares created if the plan is to sell the company. Again, Sumit took his case to the Reddit retailers via the Fireside Chat process - no new information, but simply dialogue and discussion and explanation for the reasons. Microvision amended the ask from 100M shares to 60M shares. It passed with flying colors. It passed with greater ease than the reverse split proxy item a few months earlier. I attribute that to the trust earned by Sumit and Steve through the Fireside Chat process. TRUST 3 - DOUBT 0

In the last earnings call Sumit was asked a question about the recent hires in the Marketing department. Here is a portion of his answer verbatim (from the public transcript)

"We're not getting into marketing, it's just part of a normal company building value. If you got something valuable, if you don't get the message out, how do you know that you have enough value on the table and I don't know any other way, right. People need to understand what this is and I can describe you my enthusiasm, right. But it takes more than that to tell the real stories, step by step to understand how to solve it.

So I can talk about the concepts and what the business impact is, but it takes a lot more than that. And I think to be fair, we've gotten many questions from our retail investor base, wide range of them, and said yeah, that would be nice to to do it, except we can't have that with the resources we had so far. So I think that's a -- I think that's just part of the value that you have to create when you have something valuable. And you know, I think a role of that person to help you tell the story, I think it's beneficial for the company, right."

It's little wordy, but this is the answer I was looking for when I asked the question in the 2017 ASM. His answer, conveys to me that he understands that communicating the story, the value, is utterly important. And he understands that this communication is more geared toward the current investor and potential new investors, and yes, even potential acquirers. Yes, Microvision has been cash strapped, heavily for the last year. But now, with some part of the story being communicated, Microvision was able to sell \$50M worth of equity and only dilute by roughly 1.7%. If the story was not communicated well, that dilution percentage would have been much higher, surely double digits, and perhaps so high that it would not have been feasible. TRUST 4 - DOUBT 0

In my opinion, Sumit has steadily but surely gained the trust of the shareholder. As a most recent example, in October 2020, he committed the company to deliver the LRL A-Sample in the April 2021 timeframe and his team did it. I am sure it was not easy. In fact, I interpreted some of the early statements from the prepared remarks as being reflective of that. It is not unusual for any CEO to thank his employees, and certainly Sumit has done it before. But to me, the language went beyond the usual. TRUST 5 - DOUBT 0

Oh, and in a relatively short period of time, Sumit was able to attract 3 very high profile new BoD members. Mark Spitzer, Judy Curran, and Seval Oz. TRUST 6 - DOUBT 0.

As long as Sumit continues to communicate with shareholders appropriately and deliver on his promises, he will continue to increase the trust with shareholders. As this trust increases, the shareholder will be able to take Sumit's statements at face value and have TRUST that they are true and/or will come to fruition.

Here are some recent statements from Sumit.

Statements made from the Q4 2020 conference call:

- "So that's how I look at it. So this question about stand-alone company, I think, is a good one. But I think the way to really think about it, consolidation is a point, that is happening. Strategic alternatives are there."
- "Yeah. Yeah. I think this is like a fight for the future. The last time I remember feeling this kind of excitement was what we call the internet age, right, in the late 90s or the mid-90s, you knew that there was a big revolution that would impact everybody's lives. So I'm excited. All of us are."
- Sumit in reference to the strategic alternative process - "But as we've said before, I assure you, the process continues, but we will not be commenting on any specifics."

Statements Sumit made from the Q1 2021 conference call:

- "I believe this sensor could offer a much higher level of performance, compared to any lidar currently available or announced in the market."
- "We believe our sensor will have the highest point cloud density for a single-channel sensor on the market."
- "Sensors from our competitors using, either mechanical or MEMS-based beam steering Time-of-Flight technology currently do not provide resolution or velocity approaching the level of our first-generation sensor."
- "Additionally, flash-based Time-of-Flight technology has not demonstrated immunity to interference from other lidar which is big issue."
- "I expect that key features in our first generation sensor like highest resolution, full velocity components, immunity to sunlight and other lidar could allow an incredible opportunity for us to add significant value with our software for a greater sustainable strategic advantage."
- "This pilot line will also enable us to take our designs, process maps and control plans, and launch a new highly automated production line to support expected initial sales inventory in the second half of 2021 through a contract manufacturer."

- "Our differentiated sensor is built on a large body of intellectual property, including more than 400 patents. I believe this provides us with a competitive moat in hardware and software for years to come and a very important sustainable strategic advantage."

- "I want to emphasize that the Company remains committed to exploring all strategic alternatives to maximize shareholder value."

- "In October 2020, we set the objective to complete our lidar product and said having hardware that can be productized would be an important step for evaluation by potential interested parties."

- "I believe our sensor technology is differentiated by features that will potentially be recognized as disruptive in the market. I have shared with you that I believe consolidation in this space will continue and signs of this are starting to become public. I believe Microvision needs to continuously build value with our products, roadmaps, and partnerships, while also exploring strategic alternatives."

- "I sincerely believe our company now is in one of the strongest positions in our history to be successful. We are in a solid financial position and potentially have a disruptive new product in a market segment expected to have global impacts."

- "I am truly energized everyday as I think about our future and remain profoundly optimistic in our path."

- When speaking about the Microvision Pilot line - "There's nobody in the world that can actually demonstrate that level of scalability."

- "The perfect lidar is not just about the features. It's also about scalability, long-term cost, reliability, proving all of those things and this production line will just let us allow it to show off what we've done all the time. You know, I wanted to emphasize over 20 years."

If these statements are indeed true or will become true, judge for yourself what you think the valuation of the company and associated stock price will be. I am very content with my current investment. Of course, like any prudent investor, I will evaluate my investment as I learn new details. However, if Sumit continues to keep my trust, I only envision adding to my share count. As I said in the beginning I don't believe a stock price is the company nor the company the stock price. Warren Buffet's mentor, Benjamin Graham, said the stock market is a voting machine in the short term, but is a weighing machine in the long term. The problem is we all need to cast our votes now, knowing they will be weighed later