



*This transcript has been posted on MicroVision's website for the reader's convenience. Readers should refer to the audio replays, when available, on [MicroVision's website at www.microvision.com](http://www.microvision.com) for clarification and accuracy.*

## **MVIS Financial and Operating Results Q3 2021 Conference Call Transcript**

### **Participants**

Lindsey L. Stibbard; MicroVision, Inc.

Stephen P. Holt; MicroVision, Inc.; CFO

Sumit Sharma; MicroVision, Inc.; CEO & Director

Glenn George Mattson; Ladenburg Thalmann & Co. Inc., VP of Equity Research

Sam Peterman; Craig-Hallum Capital Group, Research Analyst

Ty Brodner; Private Investor

James Groninger; Private Investor

### **Operator**

Welcome to the Q3 2021 MicroVision, Inc. Financial and Operating Results Conference Call. (Operator Instructions) Please note today's event is being recorded. I will now turn the call over to Lindsey Stibbard. Please go ahead.

### **Lindsey Stibbard**

Thank you. Good afternoon and welcome everyone to MicroVision's Third Quarter 2021 Financial and Operating Results Conference Call. Joining me on today's call are Sumit Sharma, Chief Executive Officer, and Steve Holt, Chief Financial Officer.



The information in today's conference call includes forward-looking statements, including statements regarding product development, potential product sales, scalability of technology and designs, expected performance of products, comparisons with competing products or technology, market opportunities and future demand; advantages of our technology; business and strategy opportunities and execution; expected customer and partner engagement; product development applications and benefits; commercialization of our technology; strategy for customer sales; maximizing shareholder value; managing costs; future royalties; projections of future operations and financial results; availability of funds; as well as statements containing words like potential, intend, believe, expects, plans, could, likely, and other similar expressions. These statements are not guarantees of future performance. Actual results could differ materially from the future results implied or expressed in the forward-looking statements.

We encourage you to review our various SEC filings, including our Annual Report on Form 10-K filed on March 15, 2021 and our Form 10-Qs filed on April 30, 2021 and August 12, 2021 as well as various other SEC filings made from time to time in which we discuss risk factors associated with investing in MicroVision. These risk factors could cause results to differ materially from those implied or expressed in

our forward-looking statements. All forward-looking statements are made as of the date of this call, and except as required by law, we undertake no obligation to update this information.

In addition, we will present certain financial measures on this call that will be considered non-GAAP under the SEC's Regulation G. For reconciliations of each non-GAAP financial measure to the most directly comparable GAAP financial measure, as well as for all of the financial numbers presented on this call, please refer to the information included in our press release and in our Form 8-K dated and submitted to the SEC today, both of which can be found on our corporate website at [ir.microvision.com](http://ir.microvision.com) under the SEC Filings tab.

This conference call will be available for audio replay in the Investor Relations section of MicroVision's website at [www.microvision.com](http://www.microvision.com).

And now I'd like to turn the call over to Sumit Sharma. Sumit?

**Sumit Sharma**, *Chief Executive Officer*

Thank you, Lindsey. Good afternoon everyone.

I would like to start off by walking you through our progress in the last quarter, including our product introduction at the IAA Munich Mobility show, and our priorities to frame the year ahead of us.

We have made progress since our last call. In September we introduced our lidar sensor at the Munich Mobility show. It was a great opportunity to showcase our technology alongside our competitors. ADAS safety and the need for lidar as a central sensor was part of the story for every OEM and Tier 1 that exhibited at the show. The largest volume opportunity and recurring revenue resides with OEM programs for automotive lidar sensors which has been our focus for the last several years. I can say with confidence that the race to secure an OEM program for Level 2+ and Level 3 ADAS systems with lidar as the central sensor is still wide open. No lidar company has yet secured an OEM deal that is recorded on its financial statements as meaningful backlog. I believe MicroVision is ahead of all our competitors in several key areas. Based on our work with a leading global consulting firm, we expect OEMs to make partnership decisions after careful and thorough evaluation in the next 16 months for the launch of new EV models with more advanced ADAS features which will start to ship in 2025, with a larger global

rollout of battery-operated EV vehicles expected in 2026. This could represent lidar sales volumes in the millions in the future.

I am excited to report that we have received very positive feedback from our recent OEM and Tier 1 meetings. OEMs tell us that our sensor is of interest because it demonstrates best-in-class cost advantages, size, key features and demonstrable scalability for production and quality requirements. We believe our hardware and software solution excels in each of these categories and we have received acknowledgement of this in our meetings with OEMs and Tier 1 companies. Potential customers and partners have consistently been impressed by the compact size of our sensor and the number of features packed inside. Our capability to provide highest resolution at range with a dynamic field of view and velocity field while running at 30 hertz is a major accomplishment of which we are very proud of. The 30 hertz rate could enable higher speed operation of automatic emergency braking (AEB), forward collision warning (FCW) and automatic emergency steering (AES) ADAS features that are expected to be the centerpiece features for future vehicles.

Our technology would also provide larger system cost savings than competitive solutions, an important factor in an OEMs' final decision process. An ADAS solution

integrated with our lidar would require a lower number of sensors to meet ADAS safety requirements and result in a lower overall system cost compared with a sensor stack utilizing lower resolution and lower frame rate lidar solutions. Working with a leading global management consulting company has allowed us to confirm this and enable us to more widely start introducing our product to OEMs. As previously stated, we expect to demonstrate our integrated software and hardware ADAS solution by June 2022 that will demonstrate higher levels of ADAS safety features that OEMs desire. As I recently discussed, our technology is built on well-known technologies for lasers, photo detectors, MEMS, and custom silicon components. There are no exotic materials in our sensor, so we can quite easily show our cost scalability to OEMs. The MicroVision know-how in combining these standard materials with our algorithms, software and custom silicon is what creates incredible value through our intellectual property. Additionally, with our history of delivering product for world class customers, like Microsoft, for challenging applications, demonstrates the pedigree of the Company and provides potential customers the confidence in our ability to meet and exceed their expectations.

As I frame our priorities for the next year, working to achieve an OEM or Tier 1 partnership remains our focus. Our team is working around the clock on polishing our sample for OEM evaluations that are expected to continue well into 2022.

The OEMs require a more specialized product for automotive ADAS than a product for the general market. Because of the large and valuable OEM opportunity ahead of us we have decided to our focus on the OEM business, what we call strategic sales. We will continue to prepare a product for direct sales but at a slower pace. We expect it will be available in the middle of 2022. I believe we need to maintain our focus on strategic sales given the timeframe for OEM decisions and the value this strategy could represent to our investors.

One of the questions I often get from investors: “Is MicroVision planning to go it alone?” Let me clarify my thoughts on this. The opportunity for an OEM program is tremendous and represents significant value for our shareholders. But no company can go it alone in this space for such a safety critical system. Partnerships will be required with OEMs and Tier 1s, and others in their stack, to be able to deliver a solution. In the near term, industry experts expect a huge amount of consolidation in the ADAS space where recurring significant revenue is not expected until 2025

and beyond. MicroVision is in a strong position with our hardware and software built on decades of relevant development and solid intellectual property rights.

Before I turn the call over to Steve to discuss the Q3 results, let me comment on the CFO announcement we made last week. I would like to start off by thanking Steve for his eight and a half years of dedication to MicroVision and helping the Company navigate through challenging times to the most financially secure level it has been in its history. Steve and I have worked closely through my time at the Company, and I will miss his focus and friendship.

We also announced Anubhav Verma will be joining us on November 15 as our new CFO. I am excited that he brings with him great energy and solid experience from years executing in capital markets and investment banking transactions. I am looking forward to working with him and the expertise he will bring to our management team.

In other news of interest to our shareholders, Dave Allen, MicroVision's long-time IR consultant, is retiring at the end of November. I am very appreciative of Dave's work over the last several years supporting the Company's communications with shareholders. He will be missed.



I would like to end this update by thanking our shareholders for their enormous support and confidence in the Company. I would also like to sincerely thank our employees for their continued hard work and dedication in getting us here and remaining focused on the important work ahead.

Now let me turn the call over to Steve to discuss the third quarter's results, and then I'll be back to provide some additional perspective.

Steve?

**Stephen P. Holt**, *Chief Financial Officer*

Thank you, Sumit. Good afternoon, everyone.

For the third quarter, revenue was \$718 thousand, down slightly compared to last quarter's revenue of \$746 thousand. All of the third quarter's revenue was royalty revenue and attributable to our augmented reality customer.

As I have pointed out before, royalties related to this customer will be credited against the non-refundable prepayment the customer made in 2017. Once the prepayment is exhausted, the customer will begin making cash payments for royalties due. At the end of Q3, the balance of the prepayment stood at \$5.8

million. The \$5.8 million is on the balance sheet as a contract liability. I would also like to point out that there is no time limit within which the prepayment must be used. As long as the components we developed for the customer are in production, royalty revenue will continue to be generated.

Our third quarter cost of revenue included a \$10.0 thousand credit related to the reversal of a warranty accrual. The result is a third quarter gross profit of \$728 thousand. In comparison, gross profit was \$777 thousand in the prior quarter.

Operating expenses were \$10.8 million in the third quarter, which was considerably lower than our guidance of \$14.0 to \$16.0 million discussed on August 4th, and lower than the \$15.7 million in the prior quarter. The decrease in Operating Expenses in Q2 was primarily due to a decrease in share-based compensation. Share-based compensation was lower in Q3 because Q2 had a one-time expense of \$4.2 million, and some employee awards earned in Q2 were not repeated in Q3.

If we subtract out share-based compensation expense from Operating Expenses from both Q3 and Q2, Operating Expenses would be \$8.0 million in Q3 and \$7.8 million in Q2.

Our headcount at the end of September was 83, up from 74 at the end of June.

We are a little behind in our hiring plans due to the very tight labor market, but we are very pleased that we were able to attract 9 new employees in the quarter.

We remain in a hiring mode and plan to hire more people primarily in engineering, but we also expect to fill positions in Sales and other administrative functions. We expect that by the end of the year we will have 100 to 110 people, a little lower than our prior guidance of 110 to 125.

Our net loss in the third quarter was \$9.4 million or 6 cents per share. In comparison, the second quarter net loss was \$15.0 million or 9 cents per share.

Because of the large swings in share-based compensation we think it would be useful in making comparisons if we provide an Adjusted EBITDA number. Adjusted EBITDA is Earnings Before Interest, Income Taxes, Depreciation, Amortization, and share-based compensation expenses. For the third quarter, Adjusted EBITDA was negative \$6.2 million, and for the second quarter it was negative \$6.7 million.

Third quarter cash used in operations of \$10.0 million, in comparison cash used in operations in the second quarter was \$6.7 million. The increase is due to adding \$1.0 million in component inventory for our long-range lidar. Also, in the quarter

we paid security deposits and prepaid rent for new testing and office space. Those deposits and rents came to about \$1.0 million. Additionally, in July we renewed our D&O insurance policy. Our insurance premium increased substantially due to our increased market cap, and general conditions in the D&O market. That accounted for about \$900,000 increased cash usage.

Cash and cash equivalents at the end of the third quarter was \$125.1 million, down from \$135.3 million at the end of the prior quarter. We did not raise any funds on the ATM in the third quarter or thus far in the fourth quarter.

While we have not opted to utilize the ATM since the second quarter, having a strong balance sheet and the ability to raise additional funds has given confidence to prospective customers and partners that we can be a long-term player in the automotive lidar market. The strong balance sheet also helps in retaining and attracting employees.

I'd like to return to the topic of real estate leases. In September we signed a lease for about 17,000 square feet of space that will be used for both lidar testing and office space. We start paying rent on this space in November. Additionally, we have placed a deposit for a lease on a building next door to the testing facility. If

we are unable to complete a negotiated exit from our current lease, the deposit will be returned. If we can negotiate that exit, we will likely move our main office to the new facility in late-summer or fall of 2022. The new facility is around 36,000 square feet, the facility we would be leaving is around 31,000 feet.

Now I'd like to give some thoughts on our expectations for the fourth quarter.

First, let's cover revenue. As Sumit mentioned, we are focusing on the automotive OEM business because of the opportunity for high levels of recurring revenue. In the short term this effort will consume a lot of engineering resources. As a result of this focus and the timelines that come with it, we have pushed back the start of production of lidar units for direct sales from Q4 of this year to the middle of next year. So, we expect Q4 of this year revenue will continue to be royalty revenue in the range of \$500,000 to \$600,000.

Now for operating expenses. Q4 will again have a significant amount of share-based compensation, in the range of \$3.0 to \$3.5 million dollars. Additionally, as we continue to hire and continue spending on materials and services, I expect to see Q4 operating expenses in the range of \$11.5 to \$13.0 million, including share-based compensation.

Finally, cash used in operations. In addition to the increased expenses I just mentioned, we will continue adding inventory of long lead time components for our long range lidar, so I expect to see cash used in operations in the \$10.0 million to \$11.5 million range.

Finally, let me echo Sumit's excitement about our competitive position and the reception we received at the IAA Mobility trade show last month. That show was really the first chance we had to show our hardware and the response was every bit of what we hoped it would be.

I will now turn the call back over to Sumit for some comments before we open the call to questions.

**Sumit Sharma, *closing remarks***

Before we open the call up to questions, let me revisit a couple of important themes from this call:

The strategy that I described today, though ambitious, is built on MicroVision's well-established technological depth and maturity, including our proprietary ASIC, our cost-effective components, and our demonstrated ability to productize at scale.

We expect that our engagement with OEMs will continue as we support

evaluations of our sensor in Q2 2022 and of our software features in Q3 2022. We believe that MicroVision will be well positioned to support OEMs as they roll out new vehicle programs built on next generation technology.

We remain confident in our ability to successfully execute on our strategy and I am bullish on our future.

Let's open the call for questions.

### **Question and Answer Session**

Operator (Operator Instructions) The first question comes from Glenn Mattson with Ladenburg Thalmann.

**Glenn George Mattson** Just first, let me, most importantly, start off with just -- congratulations, Steve, on his, I guess, his retirement, right, and just say what a pleasure it's been working with you all these years. So that out of the way.

Sumit, first, just -- I know it's off topic a little bit, but questions about your thoughts on Facebook's kind of big thing today talking about changing the name to Meta and the big movement in that direction. And whether or not you think that kind of spurs investment by some of the other competitors there in terms of

just kind of the AR world. I know that a lot of the AR and VR stocks got a boost today as a result of the news. So just the opinions on whether or not that spurs further investment from your one big customer or from other interest from other parties in the AR space?

**Sumit Sharma**, Good question. So of course, I've just recently read about it so I've not really processed it all. But Glenn, if you think about it, the bigger picture that you've talked about here is, if they're going out there announcing all the things they are digitally, aspirationally want to build-out, it's going to be a significant amount of investment that includes hardware, software, platforms.

So, I think what's exciting about that news when I read it was that a big company with hundreds of billion dollars of market cap is willing to say they're generating cash that they want to actually invest in there. So again, these kind of platforms, these kind of spaces, when one big party makes investments, others do as well.

So, I'm excited for this space. I've always been excited for the space. I've always said that it's going to be something big, but at the right time, and it's good to see that a big, big, big company like Meta, the new company like Meta, they're going to be making investments and strides into that space.



**Glenn George Mattson** Great. Yes. And then on the (inaudible) today focus more on OEM versus direct sales of sensors on that front. Just a little bit more on the color. I mean, I guess, obviously, longer term, the OEM is a bigger opportunity. I guess the thought would be seeing some progress on seeing some sales in the short-term would be like more of a signaling device for investors and people like that to kind of just get a sense of the acceptance of the products in the marketplace or that would kind of be helpful in some sense.

But ancillary to the big mission, which is to get into large design wins and things like that. So just a little bit more on the give and take on your thought process there. And then thinking about the fact that there's -- you talk about having product available kind of middle of next year now? Is that -- so should we start to model in kind of thinking about not seeing any product revenue until that point in time? Or should there be some sample revenue for some of these OEM opportunities that are out there?

**Sumit Sharma** Yes. I think that's a good way to think about it. And I think the sample revenue is like incidental. Think about what I just talked about, that there's -- we're working with a global management consulting firm, making sure that all the data that the market has, that we are up to speed on that one to make

sure that we're aligned. Try to minimize or meet surprises as they come in these kind of endeavors.

So, 16 months ahead of us is where some of these key decisions are getting made.

And it is important for us to focus on that and not let that opportunity pass us by.

Now, strategic sales represents the biggest revenue, recurring revenue for any

company in this space. All companies are hyper-focused on that. It's not

MicroVision. All companies are hyper-focused on that because it is the biggest prize.

Now, when you think about direct sales or I think a common term that people are

(inaudible) around is spot sales. Those are incidental, right? They go up and down

and they have market acceptance. We're going to do that as well. But to start

something like that, you have to focus the team on addressing that for the

market. It is not just something -- software that you're selling. You're selling

hardware and software and partnerships. So, it would take quite a lot of effort.

And I wanted to make sure that the company focused on the strategic side of it

because we do have a significant advantage, and I'm just more enthusiastic about

it after Munich than ever. I mean, clearly, from a hardware standpoint, we are

heads and shoulders above in size and performance than anybody else and cost advantages and the key features.

So, we really have all the things that everybody was looking for. And anybody that read anything about it or visited the Munich show can probably like attest to this where our competitors are showing things that are the size of like a VHS recorder.

And here we are a VHS cassette, the sensor size, the cost, the technology. We actually are ahead than our competitors. And it's obvious to the market right now.

So, therefore, for us to focus on the biggest opportunity in the world right now in this stage. I think the most prudent thing that we're doing. As far as the sales, yes, those are things that are there, but we want to focus the team on the big thing, given the fact that next 16 months are going to be very, very active.

**Glenn George Mattson** Last question for me. So, you talked about burning \$10 million to \$11.5 million next quarter. I imagine that's going to kind of (inaudible) as the hiring picks up pace and the investment in this sales and then engineering and everything else. So, that equates to somewhere to the tune of \$50-ish million between now and the end of next year in kind of cash burn. So, last quarter, you talked about having exhausted half the current ATM. And that you thought that it

was important to have a lot of cash on the balance sheet so that people know that you're serious and in here for the long-term or whatever. So, what level of cash is necessary? And just maybe some of the thought process on why you didn't tap the ATM in the current quarter. Thanks.

**Stephen P. Holt** Yes. I think what -- is we would like to use the balance of it, but we just don't have any definitive plans. As in the quarter, we just didn't have open windows for us that we thought made sense at the time.

**Glenn George Mattson** And is there a level of cash that you feel like you wouldn't want to go below or anything like that? Or is that so far below what you currently have?

**Stephen P. Holt** I don't have a specific number in mind, but I think what we see is a change in the conversation. When some of these conversations were happening before this ATM and the raise that we did in Q2, the going nature of the Company and our longevity was an issue, and that seems to have become now not an issue. And so, we just want to be mindful of making sure that that's the way the company appears and the company stays that way.

**Sumit Sharma** To state the obvious, people want to do business with people that are going to be around for years, right, Glenn?

**Glenn George Mattson** Right. Thanks guys.

**Stephen P. Holt** Thanks.

**Operator** The next question comes from Sam Peterman with Craig-Hallum Capital Group.

**Sam Peterman** Hi guys. Thanks guys for taking my question. I just thought I'd ask 1 or 2 on LiDAR to start here. You guys probably saw the GM Investor Day the other week, and they talked a lot about their new Ultra Cruise product, which I believe is going to standardize LiDAR, at least in certain models that are featuring Ultra Cruise. So, I was curious if you could just talk about anymore -- or I guess, just in the industry broadly, are you seeing more OEMs wanting to adopt LiDAR? Can you talk about kind of how the trend is changing there over the last few months, especially with that GM announcement the other week?

**Sumit Sharma** Yes. Yes, that's a good question. I think the eye opening part is actually public. So if Munich was one of the first auto shows since COVID. So, let's not forget that. Every OEM, every Tier 1, if you visit them, every model they were

showing, they would show whether the LiDAR would be placed inside the car. And in most cases, some of the LiDAR they were showing were not even operational. They were just showing like a mockup.

But it clearly shows that every product they're talking about that will have the higher level ADAS safety features, there's a LiDAR as a central feature as part of that. And now you're talking about OEMs that ship in the tens of millions of units per year. So, their strategy is pretty well known, and OEMs that support them, every one of those OEMs, that the top-tier Tier 1 OEMs and the mid-tier Tier 1 OEMs, they all had a LiDAR as part of their product offering.

So, it's everywhere. I think ADAS safety is coming as more battery-operated electric vehicles become commonplace. Higher levels of safety is a central feature. That is the real value proposition for them. And LiDAR will be required for them. So I think like the Ultra Cruise is an interesting product. You say it's standard, but yet it's selected LiDAR.

But if you look at the features of standard Cruise -- the Ultra Cruise, I mean, the Ultra Cruise is needing the LiDAR, actually. So again, it's starting to happen in the

premium models, but over the period of the next several years, we'll start seeing it across the board on different programs.

**Sam Peterman** Ok, that's great. And then just talking about that Munich show. I mean, when OEMs are showing you where the LiDAR is going. Obviously, there's a lot of spots that different OEMs seem to be looking at, whether that's windshield or roof, the headlamps or on the corners. Is there any particular place that MicroVision's LiDAR couldn't go? Or are there particular places that you think you integrate well into? Any color on that?

**Sumit Sharma** Well, with the smaller size that we have, we integrate a lot of different places. So that's one of the nicer options for the design teams. Let's not forget, cars are beautiful. Cars have to have a certain shape and line to them. So, the design teams are very particular about what they want to incorporate. And having a LiDAR that can fit in into a headlamp, behind a windshield, within any part of the body, gives a lot of flexibility.

And that's actually important, a huge benefit to our technology that nobody else can demonstrate working today, and they are years away from that, from anybody's speculation.

**Sam Peterman** Ok, thank you for that perspective. And then I think last one for me. There's been continued activity in the industry with new LiDAR companies coming public and acquisitions being made and Quanergy is trying to go public with the optical phased array technology. And Outster just bought Sense [Photonics], which is making Flash lidar. I guess my question is, do you guys see a trend towards kind of next-gen technologies taking hold at all? Or do you think the MEMS approach that you're going with is still more sufficient and is going to beat those technologies?

**Sumit Sharma** I mean not because that I get the opportunity to lead a MEMS based company. But honestly, I can say that MEMS technology will see a lot of traction because it's the most obvious thing that can scale, has to be cost-effective and something that will show the reliability for 15 plus years' worth of life, which is what's required for safety.

So, if you think about all kind of different steering systems, optical phase array, flash based, all of them have benefits, but all of them have detriments. You really have to do a cost analysis and a risk analysis of what will happen. A question that came up recently, and I think I want to add that here, like somebody asked me,



what about the flash based technology, right? Isn't that better? Have a global strategy -- it's a rolling shutter.

Well, most of the things in your life are rolling shutter, by the way. But put that aside, imagine 2 vehicles and they're flashing at each other. Dropping one single frame, dropping several frames, that actually causes a problem with the software, right? So, you need significant more software to be able to fill in the gaps. And again, now you're leaving the realm of actual data versus something that software is saying, how do you believe it?

You would need redundancy, you need more software. Effectively, the system cost goes up. And those flash based systems are running at 24 Hertz, and that's considered cutting edge. But everybody wants 30 Hertz. 30 Hertz is at the latency where the automotive system is more effective than a human. So, when you think about 10 Hertz systems, 15 Hertz systems, the question always is like well, aren't they all the same? The answer is like, no, this is all about latency. How much better is the system in responding (inaudible) to a human.

And if the other LiDAR systems at lower frame rates are not able to actually show that working, that's a big advantage we'll have. So I think consolidation, that will

continue to happen. I think somebody is making a bet in a SPAD array and wants to spend 100s of millions of dollars worth of investment to make custom VCSELS, custom SPADs, and investors want to support it, more power to them, right?

Our story is much simpler. The stuff sells itself. I'm not even a good sales guy, I would say. I open up the thing, and I show them inside and remind them, everything in here is things you know. There's plastic, there's metal, there is known silicon technology, that's a 200-millimeter wafer, sensor technology, a 300-millimeter wafer, lasers that you can buy, it's all the stuff that you know. It's stuff that they have in their vehicles now.

What's magical about it is how MicroVision uses our IP to develop a product. Therefore, the cost-effective nature of it and the scalability is there. It makes it much more palatable to them that these are things that they understand and know, things about a new technology, phased array, the metamaterials, I mean, goes on and on. The path for those things is going to be harder because they're more novel. The path for MicroVision is going to be less because it's proven technology. So, I believe strongly that the path that we have chosen is going to bear fruit.

**Sam Peterman** Thanks for the perspective. That's all for me.

**Operator** (Operator Instructions) I'll now turn the call back to Steve Holt to begin answering submitted questions through the webcast.

**Stephen P. Holt** Okay. We're going to respond to some of the 150-plus questions we've also received via email. Many of the questions are variations on the same topic. And many of the questions were addressed in our prepared remarks. We tried to consolidate these questions down on the same topic to address the basic issue. We won't be able to answer every question submitted, but we will go through some of them here, and then we'll open up the call to investors.

So the first question is, Sumit, can you give some detail on why you think the MicroVision LIDAR sensor is best-in-class?

**Sumit Sharma** So I think I covered this on the call today and the last question, but let me reiterate that. So let's think about like 4 categories in which you want to sort all the sensor companies and figure out like what's best about them. Believe it or not, for OEMS, the #1 is actually cost. Every conversation starts with understanding scalability of the technology and what may be the cost for the sensor, but really the cost of the delivered system that will deliver the ADAS to

them. So, there's things from a cost standpoint, as I just said, right? Things inside that are predictable. So let me we actually talk about some cost numbers, projections in the future to a level of what economy of scale, is much more believable. There's no fantasy. There's no -- these are things that can be verified because there are fabs out there. These things are pretty easily reconciled. But the cost of the system is the interesting part. If you think about when you have a vehicle LiDAR, you'll have some lower qualities of other sensor stacks, including radar and camera modules and the ECU. Ultimately, our LiDAR is a high resolution, some of the features, key features that we developed allows the system cost that they are forecasting today to be reduced. And through our partnership with our global consulting management company, what we found is that our system put inside a level 2+, level 3 would be actually be competitive to today's prices offered by camera module based systems. So, think about the cost competitiveness. We have advanced technology that is competitive today, which is also the bigger market. This means that the market that MicroVision's technology could address is significantly wider than just what's in the future for Level 3 or Level 2+.

So, cost is a big one. So I would say clearly, like very, very confidently, I can say this, very confident that when it comes to cost, best-in-class, hands down. Next one is size, right? So, as I said, people still want to buy vehicles and if they want to buy a vehicle, the design of the car is actually important, right? The beauty of it is still in the lines of the vehicle.

So, having a sensor that meets the cost requirements and fits inside the body of the car in all different places based on what the OEMs need for flexibility, that's important. And this was apparent when we were at the show that everybody, all our competitors showing up hardware publicly. The #1 thing when any OEM or Tier 1 visited us, one of the first response to them was like, wow, it really is very nice and small and tiny. And we went through and talked through about it, and they were very impressed, seeing the live demo, seeing some of the road testing data that we demonstrated and the hardware there. I think -- so clearly, like the size of it actually makes a big difference and is a big advantage for us. Anybody that's been in hardware in the industry will tell you that if you're showing hardware and like our competitors were that are significantly larger, to reduce that could take several years and significant amount of investment.

But for us, we're already there. That's another big advantage that we have. So again, I would consider the best-in-class because of that, and that's was demonstrated publicly as well.

The third one, of course, it does matter what the features are. It does matter the range and the point cloud density and the frame rate and things like that, and field of view. We have labor. Our team has labor on defining these features and executing on them. And I can honestly tell you, years ago, 2019, when I actually went on the road and actually shared these features we intended to create with these OEMs, first of all, they were surprised that we actually have such a deep understanding of what was required.

But after that, they were actually really impressed that anybody could even take on the ambitious goal to produce something like this. So we did it. We demonstrated it. And I think the impression is now that having these features inside, it is reasonable for them to actually say that other sensors as part of the stack could be removed, therefore, reducing the overall system cost.

So, if you have a LIDAR that allows us to reduce not just the future cost of our LIDAR, but also their systems, that's how they reach economy of scale. That's how

they will have more models that they can actually put this on to. So that's an exciting thing. So, this is how we think about features, right? It's not about this feature versus ex-feature. One OEM may value range more. The other one values resolution more. The third one may value some combination, right?

We can support all of them from the same hardware. That's a very, very good thing. We're not tied down. So, as we mentioned, right, our team worked very hard to polish the features and make sure that the OEMs, they get to see what's important to them. And from the same hardware, we're able to do that. So that's actually -- that's a pretty big win for us. Again, it's best-in-class. We don't have to develop a new product to satisfy their needs of understanding what's possible.

The last one I would say is maturity of technology. So as I said, things that I'm talking about, things that this company has, have a long history. We have history with big companies like Microsoft and Sony and others that we have demonstrated it at scale.

So really, regardless of how much revenue this company has generated in its history. The core technology maturity has been demonstrated, and that's actually a big part because that makes it believable, that makes something -- that's a

partnership that people want. So again, I believe very strongly that our maturity of technology is significantly higher for a silicon-based system.

People can have Galvos and other kind of -- [bean string] technologies, but none of those are as mature or as cost effective. So if you take all these 4 legs of the table, you need all 4 to have a very, very secure product and to make a claim you're best-in-class. And I'm very confident that I can say that we are best-in-class compared to any LiDAR company out there at the moment.

**Stephen P. Holt** Second question is that on a previous call, we've talked about our ability to output axial lateral and vertical velocity of moving objects. And other LiDAR companies seem to be making similar claims about those abilities. So, what can you tell us about MicroVision's capabilities and the capabilities of others in the space?

**Sumit Sharma** It's a good question, actually. So the #1 thing to think about is the latency we talked about, the low latency system. So, the 30 Hertz number is very important. For safety, you're going to have to make decisions faster than a human would. And you need a system that's operating at about around 30 Hertz, where that's about 33, 34, maybe 35 milliseconds. And the refresh rate is so fast. It's



important to see everything in the field of view and to be able to predict what will happen in the next 30 milliseconds.

Giving that information to the central computer allows them to predict what to do with the maneuvering that they're about to start, how much to steer, which way to go, slow down, speed up. These decisions have to happen at a very, very fast pace. So, velocity is actually a very big component of it. So, in a LiDAR, just knowing exactly where the point cloud is, is very important.

But additionally, and probably more important is exactly where the velocity of that cluster of point cloud is going. You may not know if it's a motorcycle or a Mini-Cooper or an Escalade. It does not matter. It matters that those cluster point clouds, you predict where they will be in the next 30 millisecond, 60 millisecond, 90 millisecond, and so on. So, as you're maneuvering you can predict where you will end up and is there any way you can avoid them. So if you think about these prediction things, velocity is a big part of it. The way we do velocity of course, is since we have high frame rate, you have our software. That's going to be -- of course, be condensed down into our ASIC eventually. Velocity output is happening continuously. Cluster Velocity algorithms are going to happen continuously.

And we're also going to be able to give lateral and axial, meaning in the direction of the motion of your vehicle and 90 degrees to it. You need both of these components. The third one, vertical is (inaudible) because cars don't bounce up and down too much, but it will be there, but it will be kind of noisy.

If you only had one of those, your prediction is always going to be off, so you need more sensors. So, your sensor stack cost goes up. But from a signal sensor, we're able to do both axial and lateral, and that is a first. And so far, we have not seen anybody talk about it at 30 Hertz to be able to do that. So, I'm not really sure if I've actually seen any LiDAR company claim that at 30 Hertz, they can do both, which is what the OEMs have required.

**Stephen P. Holt** All right. Next question is about just asking generally about employee morale at MicroVision. So first, we have a really great team at MicroVision. Sumit and I are always amazed at the capabilities and the creativity and the dedication of the people here. We think morale is good, and we're really thankful that turnover has not been a big issue for us. And so we think morale is good.

The next question is on the ATM. And just lots of different questions about the ATM. As I said in my prepared remarks, the ATM gives potential customers and suppliers, employees, and the prospective employees confidence in our ability to be a long-term partner in the automotive LiDAR space. And that is important and when we're talking about the businesses we're talking to. And also, the ATM with Craig-Hallum was not used in the third quarter and \$70 million remains available on it.

As I said, last quarter, we'd like to complete the raise on that ATM, but don't have any definite plans as to when we would do that. I'll also point out that under the ATM agreement with Craig-Hallum, Craig-Hallum is not allowed to short MicroVision stock.

Okay. There's some general questions about the IAA Auto Show in Munich and any additional color you can provide about it and the response we've received. I know we've talked about this a fair amount. I don't know if there's anything else you have to add.

**Sumit Sharma** I think, Stephen, as the market put it the best that the reaction that we had hoped, that we expected to get. We received it across the board,

very welcoming to show it publicly and get a lot of praise from OEMs and Tier 1.

So, it was a great experience.

**Stephen P. Holt** Next question relates to other verticals. And when people talk about other verticals with us, they're typically talking about augmented reality or interactive display products. And what's the status of these verticals? Are you actively pursuing or investing in them now?

**Sumit Sharma** Now, as we have shared in the previous calls, our focus and effort has remained on the automotive LiDAR. Since I've taken over. I think I've been pretty clear about it for the last 18 months. But I've also said that we are -- I believe that we are so far ahead in those verticals to anything that the market is offering, we stand ready to work with any partner as they come along. We're -- we put together our BD team, as you know, we've just hired our first VP of BD in my tenure in Germany. And of course, we're also looking to expand that in the U.S.

So, I think as these markets are developing, we stand ready. We know all the players. They know us. But right now, our focus remains solely on the automotive LiDAR, given the fact the opportunity is so big, and it is right in front of us.

**Stephen P. Holt** That's a good segue. The next question was about the business development staffing. And first, as Sumit said, Thomas Luce coming onboard has been a big -- he's making a big impact already. And we're just really excited that he's with the Company, and he's working on adding to the European team. And as Sumit said, we're continuing to look for folks to expand the North American team in the near future.

And then what can you tell us about how LiDAR operates in inclement weather?

**Sumit Sharma** It's a good question. So just let me get some content. So, if you think about systems that are shipping right now, they have some level of sensor fusion. What I can tell you, depending on the OEMs, vehicle that you have, they all have some restrictions based on weather conditions, you can't use the feature. So, because the regulations, right, there are some limitations of what features -- what can be operated. So those are part of today's reality. As you can imagine, that's not going to go, right? Effectively, if you're going to have an ADAS safety feature, it has to work always. Your airbags work all the time. Your ABS brakes work all the time. So therefore, an ADAS feature has to work all the time.

When you think about a LiDAR, so this is a question I got quite often also in Munich. Your 905-nanometer laser, what happens in rain. I think I've answered this before. The density of our point cloud is so high that if let's say there was a rain drop that hits one of our pulses, and that one is gone, there's still significant amount of other pulses that you can drive and you will still get very high-quality data. Unless you were driving through like a sheet of water, like a waterfall, right? That's not realistic, let's be honest. So, LiDAR by themselves are going to be able to operate that. There is no magic saying that 905 will not be there. What I can tell you is the most investment and the most interest people get is when I say the words that we have 905 nanometer lasers. So, OEMs that have looked at this problem are not shying away from that because they do understand that this is a sensor fusion problem that once we have our software integrating radar and them integrating other parts of it, those products by themselves are going to be significantly more valuable because they will solve the problem. We have redundancy, and you will still have the sensor that's able to provide it.

So, when you think about range of resolution, those are actually big things. So, when you have a company that says, well, 1 million points per second is good enough. We're looking good here. That's not true actually because that's not what

OEM wants. And consistently, I can tell you, we always get RFIs. And I recently saw one where they wanted even a higher resolution, they want to explore it. And of course, we want to support that and our system can do that. We respond to those. And it's amazing to me that weather is an issue now. A regulatory body ever let this system be operational in white out snow conditions. I can't answer that. That's really for regulatory bodies, right? But you can imagine that over a period of time, these sensor suites are going to be -- asked to be more and more sophisticated. But as we sit today, there is no impediment for us to see a fast adoption.

**Stephen P. Holt** Okay. And the last question we have, before we take some more live questions relates to the LiDAR software. And what -- you talked about LiDAR, the software component of our product. What can you tell us about our LiDAR software?

**Sumit Sharma** So our LiDAR software, this is the key -- this is a very bright jewel in the crown for MicroVision. This is something that all of us should care a great deal about, and I'm very, very excited about this. We're working on some things that would allow OEMs to start evaluating a system where more of the load from their computing can be shifted into our ASIC through our algorithms that we've already

developed that we are going to develop and we're going to actually demonstrate.

And this is what the exciting news about the June 2022 time line that I talked about previously and also touched upon today is. That actually is a very, very big deal for us in the future. And having a big software component, besides the hardware component, makes the Company a lot more valuable. So having our custom ASIC and software story getting solidified, that's important to all of us.

So, what's in those features? I think it's more -- we're going to demonstrate it. I think we don't want our competition to listen to our earnings call and understand what features are coming in the future. But I can clearly say that, I think I hope I've demonstrated over the last 18 months that I have good insight into what's happening in the industry. And I can say with confidence that we are on a very good path and our global management consulting partner also has vetted this out with us of course, but also with OEMs. And they strongly agree with me that this is something that's going to be pretty impressive.

**Stephen P. Holt** Okay. Let's now take some live questions from investors.

**Operator** Thank you. (Operator Instructions) Your first question comes from Ty Bordner who is a private investor.



**Ty Bordner** Ok, thanks. First of all, congratulations to Steve and also Dave Allen for your impending retirement. So, thanks for everything you guys have done over the years. I appreciate that.

Sumit, in your prepared remarks, you referenced a focus, which I think is on OEMs, I would say, versus Tier 1s or even mobility as a service companies.

Maybe you can help add some color to that. And also, I think you labeled it, just in terms of the labeling, strategic versus direct, maybe you can also label some or put some color into that -- those words as well.

**Sumit Sharma** Okay. So when you think about the OEM, of course, those are the cars that you will buy. Tier 1 and OEMs are connected. No company is going to be able to ship their product directly to the OEM. They're going to have to work with an approved Tier 1 to supply because the Tier 1 is the one that actually does the manufacturing of most of those modules for the OEM. So, our go-to-market strategy is pretty straightforward and similar to lots of other people.

We focus our energies and our efforts and our attention towards OEM to make sure they understand the gravity of the problem that we've already solved for them. And we also work with Tier 1 because we know at some point, we're going

to have to have a Tier 1 partnership that we expect to be favorable to MicroVision, after all the innovations that we've done, that allows us to ship that product for OEM programs.

We are not endeavoring to become a Tier 1. That's just -- that's not who we are and that's not what any company should be thinking about. That's -- no, people can think what they want. But that's not what we're going to think about. But whenever you talk to an OEM, they always want to know your structure and how you want to work with a Tier 1 in that case, and we're well aligned with our expectations. So think about OEM and Tier 1 together.

We are focused on ADAS. I'm sorry, go ahead, Ty.

**Ty Bordner** Right, ADAS. But it's a little confusing. So ultimately, I guess it sounds like you pitch to the OEMs but then almost they direct you to the Tier 1s for, I don't know, manufacturing production. Is that right? Or how should we think about that?

**Sumit Sharma** Yes, I'm not going to comment on that because every Tier 1, you think about it, there's a certain amount of margin they're going to pay. I think we've done some great work here. Our goal is to be part of that and make sure

that the margin stacks in our favor, right? So that's where -- what you want to do is if you want to get -- if you get adopted, if the OEM believes that you have the right solution for what they need and they want to work with you and your technology. There's a thing called directed buy.

A Tier 1 will have to work with you and strike a deal that makes sense, right? And none of these deals that anybody would do or we would do in the future would be exclusive of one Tier 1. So, we would find the most favorable deal for our investors and OEMs notice as well.

But the important thing is they don't adopt because just of one factor, right? And at Tier 1, they themselves don't know which one to pick. They want the OEM to make the choice, and they want to go work out a deal. So as I said, you're part of a group, you're going to be in the stack and you have to work with them, and there'll be other partnerships you have to prepare for.

Before you go on, I want to add one more thing. So, your first question was, what about mobility as a service? So, this, OEM Tier 1 is ADAS. Mobility as a service companies are primarily focused on autonomous driving, Level 5. And they're much more aspirational as in like it could be 10 or 20 years before real products

have been fielded out there or 6 years in trucking or 3 years, whatever number some of these companies are saying, okay?

They're too different. But the biggest price, known biggest price to get confirmed by multiple people globally. It is the OEM. 90 million to 100 million cars standing in the next 5 years.

**Ty Bordner** It sounds like you got to convince the OEM or OEMs that you're the right product and then they sort of direct the Tier 1s to go and make it all happen. Is that kind of right?

**Sumit Sharma** That's correct, yes.

**Ty Bordner** The second question I have is you use the term partnerships. Partnerships will be -- looking at your prepared remarks. Partnerships will be required with OEMs and Tier 1s and others in their stack to be able to deliver a solution. And then you also, in the very next sentence, talk about a huge amount of consolidation. So maybe you can comment on what do you mean by partnership exactly? And then you refer to consolidation again. So maybe you can talk about both of those.

**Sumit Sharma** If you think about partnerships, I think how will people trade and partner with each other. Clearly, we've developed the hardware, we invest a lot of money in it. We develop software, invest a lot of money. Silicon. Lots of this is in our IP.

And all companies are looking for recurring revenues that support significant multiples to their market cap, right? Obvious thing to stay here. We are a high-growth company. So it's kind of important for us to strike a business, set a business deal that allows us to actually stand up for that.

So, when I think about partnerships, it's about how do you partner with each other. If we are the ones that have developed the technology and we're the experts at it, right, how will we participate of how that thing gets manufactured, how does the revenue get split, how does the margin get split, right? So we want to be controlling.

I believe by us owning all our IP, we're in a controlling position, and we have to just demonstrate to the OEM, how we can partner with them and solve their problems. They might have already solved their problems with that.

So what was the second part of your question, actually? I just recall, there's another part of the question I did not answer yet.

**Ty Bordner** In your prepared remarks, the very net sentence on consolidation.

**Sumit Sharma** MicroVision is a public company. So at any given time if somebody feels that -- if somebody is looking for a LiDAR company, a big company with lots of money, I think we're available. And it's the gravity of the problem you solve determines what the future growth of the Company would have been. I mean think about terminal value to be established right now, but the market is just so big.

So, for us to work feverishly hard and why I focus all our attention on the OEM to get that recognition is more valuable to our shareholders than any kind of spot sales or direct sales, like I talked about. So why I focus the Company on that?

Because establishing that, by doing that, our products, our technology would have a 10-year or multiple years worth of -- decades worth of future. That has more value to the shareholders.

Direct sales, yes, we're going to do direct sales, right, but those are spot sales.

Those are periodic and nonrecurring.

**Ty Bordner** Last question. So in your [Investor Place interview](#) the other day, you said investors need to remain patient, which, as a long-term investor that makes sense. But of course, we're all looking for a deal, right? Without respect, though, to a deal, what are some milestones or events that we can -- as an investors, we can use to track progress over the next near to midterm.

**Sumit Sharma** I think we're just going to focus on the OEM business. And I think as it materializes, Ty, we're going to talk about it publicly. But if there was -- honestly, if there was anything that I wanted the shareholders who track, that would be valuable, I would have put it in the call today.

**Ty Bordner.**Ok thank you. Appreciate it.

**Operator** The next question comes from James Groninger who is a private investor.

**James Groninger** My question concerns any developments that you may have made to date on nonrecurring engineering. Does that look like an area you can use to focus on the OEMs? And working on several nonrecurring engineering programs may be a way for you to develop some simpatico or some credibility as those move forward? Or have you kind of dropped that strategy?

**Sumit Sharma** No. As our go-to-market strategy is that we're going to face them. We're going to work with them and show them a solution. I expect there may be some names, maybe some nonrecurring engineering programs that may come along. So, I don't think that we have put it aside. I think we are actively pursuing any kind of engagement with OEMs.

**James Groninger** Ok. Thank you.

**Operator** This concludes our question-and-answer session and concludes the conference call. Thank you for attending today's presentation. You may now disconnect.