



AERO GLASS

Augmented Reality Smart Glasses for Aerial Navigation and Automobile Driver Assistance providing Safety and Navigational Information in a Natural 3D Experience and Vision



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CEOCFO: Mr. Maróy, what is the vision behind Aero Glass?

Mr. Maróy: The vision behind Aero Glass is that when we are navigating the outdoors, the experience should be the same as we naturally do in the 3D space. Instead, currently we are pretty tied to looking at all sorts of instruments and aids within a dashboard or a cockpit. We are looking at gauges on a car dashboard or a GPS map display to find our way around or if it is in an aircraft and we are looking at very complex instrumentations to make sense of our situation. Our vision is to get rid of all these instruments and display all human made aspects of navigation and safety and navigation related information as a natural 3D experience when looking around. The pilots or the driver's perception of his surroundings and situation, his reality becomes much easier and natural to comprehend and then as a result, he will have a better time navigating around.

"We have found ... the biggest aha moments with huge smiles on people's faces when we have a person put on our glasses and we drive them around or fly them around and they see the whole thing for themselves."- Ákos Maróy

CEOCFO: Assuming you have this and people want it, how do you bridge from the old method to the new method?

Mr. Maróy: This would be a gradual process. On one side, even when using a Mixed Reality solution, as you can still rely on the traditional instruments or dashboards. In terms of symbolism, we are borrowing some from the existing and thus familiar symbology, while at the same time we're introducing radically new visual concepts enabled by our 3D mixed reality technology. When we feel that the tradition is limiting us then we actually are not going with the tradition. To bridge this experience, you would still be able to use your traditional methods if necessary. Whenever you feel Mixed Reality content that you are looking at is not giving you the perception you need, you can still glance downward. When people try our approach, our experience is that you do not really do that though, the information that we display is sufficient.

CEOCFO: What would someone see in a plane or a car?

Mr. Maróy: When you are flying an aircraft and looking outside on route, you can marvel at the clouds and the sun and scenery, but inside, there is a lot of safety and navigational related stuff out there that is not visible because there is nothing physically corresponding to them. For example, there is nothing physical corresponding to an air space or your intended route in the sky, it is just air, but these are very important guidelines and boundaries. In our case, we draw all these things as 3D objects outside. When you look ahead and see your own highway in the sky, basically your own flight plan where you should be flying, you see it in front of your and have a very easy to understand perception of if you are in

the right spot inside of your intended route or if you have to move a little bit to get in there. The same thing with airspaces is that we show them as 3D bodies in the air so you can see when you are approaching the boundary of one, you can see when you are passing through an airspace, still looking outside and around. That is what a pilot would see. Then the list of features goes on and you would see other aircrafts that are too small to see naturally or in low visibility you would see the terrain, which you do not want to hit. You would also see runways and taxiways when you are approaching and taxiing out, which is especially useful in very low visibility because. When it comes to a car driver, the navigation experience would be similar. For example, we did an experiment where we are using a follow me ghost car visualized in front of you, so you see a car which is drawn just for you for that particular route and you just follow that car to find your way around. You no longer need to look inside your GPS map or listen to the directions of your navigation system. You are also sure to find the third exit on the roundabout, because you literally see the car in front of you exiting the roundabout and that is what you need to follow. These are some of the examples that you would see.

CEO CFO: *What were the challenges in creating your app?*

Mr. Maróy: The challenges are that all the technologies that we are using are at the early stage and immature to some extent, so there are many challenges involved in positional accuracy, overlay accuracy, fitting everything inside a glass format with limitations of computing capacity, heat generation and things like that. Those are the biggest challenges. Currently, you cannot really just take a smart glass off the shelf and write an application that does what I described. We had to dig deep into the basics of these technologies and then we had to modify them to create additional hardware, modify the glasses that are out there. This whole technology stack is at an early stage still. That is basically the biggest challenge. From a feature perspective, the biggest challenge is creating the precise overlay of on reality and a natural to understand symbology that fits well as an overlay.

CEO CFO: *Where are you today?*

Mr. Maróy: Currently we have a working technology. We can fly with it in aircrafts and helicopters, we can drive it around with it in cars. Now we are looking to utilize this technology in all the different transportation segments that this can be used for. We are exploring possibilities of collaboration in the aviation space and also in the automotive space right now.

CEO CFO: *Would you tell us about recognition with the Auggie Awards?*

Mr. Maróy: We have been following the Augmented World Expo, which is the most important AR event happening every year. We have been present at AWE already in 2015, so we were eager to participate at the Auggies. We were participating in the best app category even though we are more than just an app, but that was the category that best fit our profile and we were super excited to be ahead in the public voting as well and also extremely excited to hear that we have won the award. I think this shows that what we have created is unique and at the top of the game. We were very excited to see the recognition from the industry itself.

CEO CFO: *How are you able to reach potential partners?*

Mr. Maróy: We are doing a very well defined and small niche in AR. We are focusing on providing a mixed reality experience for people sitting inside moving vehicles. This is not something that is regularly done, you are very hard pressed to find similar solutions to ours. Even when there is a demonstration of a concept in a moving vehicle, usually the demonstration is limited to a non-moving vehicle, because making things work in a moving vehicle is hard. This differentiates us from the rest of pack quite distinctively. In that sense, we do not have trouble explaining how we are different from all the others out there.

CEO CFO: *When you are speaking with the appropriate person, is it an easy fit for people to recognize and is there a typical aha moment when people get what it is you are doing and how it can work?*

Mr. Maróy: There certainly is. Of course a picture is worth 1000 words, a video is worth a 1000 pictures and the real experience of our technology is well worth a 1000 videos. We have found throughout our short lifetime that the aha moment comes when we show real video footage of what the experience looks like or the biggest aha moments with huge smiles on their faces when we have a person put on our glasses and we drive them around or fly them around and they see the whole thing for themselves. Anything short of that like showing still images or trying to verbally explain is difficult and people would not really understand, but when we show them the footage of what they would see, or they experience firsthand, they really understand it in a second.

CEO CFO: *Are you seeking funding or investment?*

Mr. Maróy: Currently we are fundraising and the goal of it is to be able to pursue all of these collaboration possibilities described earlier. Basically we have the technology working and now the next step for us is to make this technology work

in a real environment and that needs collaboration with aviation and automotive players. That is what we want to pursue with the next step. The next funding round will be focused on financing such steps.

CEOCFO: *What surprised you through the process of developing and starting to commercialize?*

Mr. Maróy: We took the lean startup approach. We always reached out and got whatever we could off the shelf to see if that would work for us. Then to our surprise, no many things still do not really work as one would expect, so you have to create base technology solutions to create the vision that we are looking into. This lead us to create the custom hardware add-ons and stuff like that which we really did not think of in the beginning. That is one of the surprises that we are regularly getting. The other surprise is that the base technologies that we have to utilize, they either do not exist and then we have to create them and on the other side, they still exist and are really in an early stage, imprecise or very expensive – all of which limit us offering an affordable product, and we have to bridge that somehow. This is really cutting edge.

CEOCFO: *Why pay attention to Aero Glass?*

Mr. Maróy: Pay attention to Aero Glass because we are the ones who will make driving your car safer, easier and more fun. We will also make driving around as a passenger even in an automated car more fun. We will make any kind of transportation segment safer. We are the ones who can help you have a personalized augmented experience during your travels just for you personally or for your special mission.



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