Unmanned Aerial Logistics Platform for Drone Package Delivery

“Avision Robotics is a forward thinking company. We are working on the next generation of cutting edge technology solution for our clients - Unmanned Aerial Logistics Platform. Our team of talented and dedicated engineers already made huge progress in bringing product to the market, which is being deployed overseas in real-world urban environment. We welcome early adopters and testers domestically and will be ready to open our platform operationally for package delivery customers once the regulations are in place in the US... Safety is our number one priority. Therefore, we develop sophisticated traffic management system with multiple levels of de-confliction and contingencies. On that front, the platform is built with the grade level of air traffic control. We collaborate with NASA and other regulatory agencies around the world to build the echo system that will be safe for all airborne objects and people on the ground.” - Stas Mozolyuk

Stas Mozolyuk
Founder, CEO

CEOCFO: Mr. Mozolyuk, what is the idea behind Avision Robotics?
Mr. Mozolyuk: Company mission is to improve our lives with the help of robotic solutions. The idea was to organize robotic traffic into a safe environment and enable business applications such as package delivery. There are other uses of technology but we are focusing our efforts on delivery domain and targeting logistics companies, ecommerce stores, and other cases involving goods transportation with unmanned aerial vehicles.

CEOCFO: What do you understand about the process? What is going into your development that would set it apart from many others in the same arena?
Mr. Mozolyuk: Safety is our number one priority. Therefore, we develop sophisticated traffic management system with multiple levels of de-confliction and contingencies. On that front, the platform is built with the grade level of air traffic control. We collaborate with NASA and other regulatory agencies around the world to build the echo system that will be safe for all airborne objects and people on the ground. Compared to companies developing proprietary drone delivery systems, the technology will be available to any small, medium, or large business. In addition, we already completed testing and are in the process of deployment, which gives us a unique opportunity to be ahead of competition.
CEOCFO: Where have you found as the biggest challenge so far?
Mr. Mozolyuk: As of today, FAA regulations in US do not allow flights beyond visual line of sight. This means an operator of UAV must be able to see the drone when they launch it. We are working on the next generation of technology that is completely autonomous and able to fly and carry packages in excess of twenty miles. Hence, regulation or lack of regulations in this case is a limiting factor. There are other challenges related to multi-complex technology that we are working on and will overcome. An example is ‘collision avoidance’. Unlike pilots of manned aircraft who have eyes, flying robots are not equipped with visual sense. They lack recognition and ability to make smart decisions. One key component of our platform is computer vision sense-and-avoid technology, which enables collision avoidance and safe precise landing.

CEOCFO: Why are you so sure it will become generally accepted?
Mr. Mozolyuk: First of all, ecommerce is exploding everywhere around the globe. Multiple surveys indicate consumers are interested in getting instant gratification for their purchases. There are certain categories of goods including gifts, medicine, and other urgent items customers would like to receive right away and are willing to pay premium for it. Second, government agencies recognize the need for regulations and are actively working on developing them. Finally, there is a real demand for AVISION platform, which is on target to be fully operational in early 2016 in parts of Europe where regulations allow.

CEOCFO: Where would this be applicable in the construction industry?
Mr. Mozolyuk: An example of application in construction is structure inspection or site survey. In general, aerial inspection is in high demand now. This applies to construction, energy, agriculture, security, search and rescue operations. UAVs are currently equipped with high definition cameras and able to take quality images, which are ‘stitched’ together and transformed into meaningful decision-making information. AVISION system supports fleet management and this functionality can be applied in virtually all the use cases above.

CEOCFO: Are you funded for the steps you would like to take or will you be seeking partnerships and investments?
Mr. Mozolyuk: Our founders contributed extensive IP into the company, so we did not start from scratch but extended on years of experience in developing air traffic control, computer vision, and simulation systems. We are currently looking for funding to help us take our technology to the next level of complexity and extend logistics platform capabilities. In addition, we would like to scale to other markets including developing business opportunities and strengthening collaboration with our partners in the US.

CEOCFO: What has surprised you as you have undertaken this venture?
Mr. Mozolyuk: The pace of development of the industry and technology. Our venture combines deep knowledge of different domains: robotics, wireless communication, computer vision software, aviation, and artificial intelligence. Yet, the team has made great progress within the last year alone.

CEOCFO: Are the regulatory bodies coming along and in understanding the concept?
Mr. Mozolyuk: Federal Aviation Administration and NASA are heavily involved. They actively participate in the dialogue with industry, attend and coordinate UAV conferences, and develop regulations. Unfortunately, some actions are lacking faster execution. FAA for instance was scheduled to deliver set of laws by September of 2015 and we are hitting delays on that front. That is kind of a setback, but I believe the industry in partnership with regulators will come together and deliver what is best for consumers, which is service coupled with ultimate safety.

CEOCFO: Why does Avision Robotics standout?
Mr. Mozolyuk: Avision Robotics is a forward thinking company. We are working on the next generation of cutting edge technology solution for our clients - Unmanned Aerial Logistics Platform. Our team of talented and dedicated engineers already made huge progress in bringing product to the market, which is being deployed overseas in real-world urban environment. We welcome early adopters and testers domestically and will be ready to open our platform operationally for package delivery customers once the regulations are in place in the US.

Interview conducted by: Lynn Fosse, Senior Editor, CEOCFO Magazine