



Field-to-Plan Process Software and Application to fly automatically a Drone with a High Resolution Camera is Revolutionizing the Surveying and Construction Market



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“We are a software and application company that develops a photogrammetry software that converts aerial and ground photos from the field to high-precision geo-referenced 3D image-plain model... Datamate’s solution delivers a complete site visualization and analytics to the office, saving 80% of the field crews time and effort.”- Tal Meirzon

CEOCFO: Mr. Meirzon, what attracted you to Datamate?

Mr. Meirzon: Datamate is my third CEO position. It is a growth startup company with a unique technology, solution and people. In the past I was managing a startup company and a grownup company and what attracted me to Datamate was starting a business from the beginning. This is what startup is all about a group of dedicated people with a vision to change and deliver innovative and unique value for our customers. The market arena of Datamate is the civil engineering market, specifically; Surveying, Construction and Inspection companies which for me was also something new. I had spent most of my carrier in the telecommunications business and the civil engineering market was appealing for me.

CEOCFO: What is the focus at Datamate today?

Mr. Meirzon: Datamate is trying to revolutionize a process in the civil engineering market which is called a field-to-plan process. The traditional process is where surveyors are going out to the field to collect precise information using sophisticated GPSs and sketches in their notebooks, so the process is very cumbersome and long. It is not always safe because they are doing this work in construction sites. The Datamate vision is to digitize the entire process and make it fully automated, highly precise, cost effective, safe and quick. The end of this process is to deliver this information from the field to the survey and construction office. Datamate’s solution delivers a complete site visualization and analytics to the office, saving 80% of the field crews time and effort, with precision of 1-3 centimeters. We totally eliminate the need to go back to the field for any additional information.

CEOCFO: What are the challenges in all of the different areas, such as safety and speed?

Mr. Meirzon: The challenge is in how to bring as much information as possible from the field, the end of the process is usually a map or a 3D visualized model that people will be using in order to build, measure and inspect infrastructure. Therefore, first you have to bring a lot of information from the field; secondly, you need to bring this information quickly. Third challenge is safety; those places are in process of being built and require climbing on dangerous infrastructure. Lastly, you don't want to come back to the site again to collect more information. It means that the information that you have to capture is complete and precise, going to the site again is costly and takes additional time.

CEOCFO: What have you developed to answer the challenges? How has your product enabled this to be done?

Mr. Meirzon: I will have to explain very generally what the product is. We are a software and application company that develops a photogrammetry software that converts aerial and ground photos from the field to high-precision geo-referenced 3D image-plain model. How is this information being captured? Normal it is a camera shooting photos from the ground or from a drone with a camera payload from the air. This collected information of pictures, called imagery information, is further processed by our software to generate a precise, survey grade, 3D model of the site of interest. In order to perform these processes in the site of interest very quickly we have developed an application that is calculating an automated flight and imagery plan, so all you need to do is just push a button and the drone with a camera is flying as long as needed to take all the pictures required to generate a complete 3D site model. Sometimes it is tens of photos,

sometimes it is hundreds or even thousands of photos. Photos are being downloaded and after a certain processing time a model is generated. With the models' computer visualization, one will see in the office the details as if he is in the field. You can then directly measure and draw all your layers and measures; meaning that you are coming precisely within about 1-3 centimeters of every particle or everything that you have out there that you need to measure. Today it is becoming more popular to use drones as a professional tool. We provide a complete solution of a Drone, Software and Application.

CEOCFO: *How can you get enough detail? Are there some instances where you need to feel the soil or touch the rock or have hands on? How can this replace hands on?*

Mr. Meirzon: The traditional work that is being done is hands on, with very precise measurement equipment based on sophisticated GPS. I am not talking about the GPS that we have in our cellular phones, it is tens of thousands of dollars' equipment that collects information from many satellites and ground stations. This information is the precise information of points in the field (called Ground Control Points). Then, you compliment these precise points information with a hand sketch of the site in survey. With our solution, you take photos of the field then combine all those pictures to one 3D image-plain model. You can zoom-in and out in every place in the area that you have pictured. You achieve a much higher precision than the hands-on process. Now you have all the field representation and analytics with you where you can find all the information at any point of time, even if you left the field and then you found out that you forgot something. You go back to your model at any given time and find and measure the information of interest.

CEOCFO: *Is the industry ready to advance? Is there skepticism? With so much noise about drones and so many people jumping into that arena, what is the reaction?*

Mr. Meirzon: That is an excellent question, because the markets that we are selling to are construction companies and survey offices; usually people t are engineers, professionals and process oriented, very structured people. Some of them are early adopters, but the majority are quite conservative. We need to present the solution, provide a demonstration and trial. They try it and understand the value of saving about eighty percent of field crews time and effort. In the office they measure and draw and see the completion of the trial project much quicker and more cost effective, then they are willing to invest. We sell it on a yearly or a perpetual basis.t. When they try it and start using it, it is working for us. The drone market in general today, which is an adjacent market to our market, is a market that is trying to move more into professional applications. Today it is not enough to fly a drone rather a drone with a professional payload. This payload can be a camera, or other payloads for other applications. Today cameras provide tens of mega pixels, so the driven precision that you can get is very high. The drone market has quickly developed to the extent that the drone itself is not a very expensive tool today. It has combined the ability of the drone to take pictures at very high resolutions from the air and generate money for the people that are using it. There is a market place being generated by people than needs the imagery for various professional purposes and drone pilots / service providers that charge for that picture taking. Today, the drone market is looking for professional applications in order to generate revenues.

CEOCFO: *What type of training is involved for the user?*

Mr. Meirzon: Obviously, people need to know how to operate the software. People that are coming from the market and used to do the traditional process of surveying; it takes them about five to ten minutes to understand the five steps that the software is structured around. The more difficult part for surveyors is drone flying. They are not used to flying drones. Therefore, the main barrier in the entire solution of a drone and the software and the application; is actually how to fly a drone. This is where we stepped in. We developed what we call DatuFly. DatuFly is our application that is sold today in the Apple Store, coming soon to Google play. This application allows a normal surveyor that has not flown a drone before to buy a drone and to operate it automatically by downloading this application. The application helps to design the flight plan and execute it. Flying the drone for the surveyor in order to capture the pictures the way it is required by the software to process it to a model. One of the main barriers that we have identified a year ago is the drone and how to fly it by people that were not used to flying it. This application basically eliminated one of the main challenges that surveyors had in order to do this type of job.

CEOCFO: *Do you work directly with potential customers or do you work through partners or distributors? What is your model?*

Mr. Meirzon: We sell both ways. We have more than 40 distributors partners that are selling us are selling us today, where the US is the main market for us so far. Recently we caught the attention and partnered with a strategic partner; the number one drone manufacturer worldwide, which is a Chinese company called DJI. It is a huge and successful company. They are looking for enterprise applications to complement drones and payloads where we provide the professional software, so basically combined together to a solution that is called Site Survey Solution. Today this solution is being sold by DJI and Datumate. This solution includes a bundle with a drone, software for customers to have an "all in one" bundle.

CEOCFO: You recently unveiled your DatuFly. Would you tell us about that?

Mr. Meirzon: Photogrammetry driven 3D model software is called DatuGram™ 3D. DatuFly™ is the application that is automatically flying a drone to take the pictures that will be the input to the DatuGram™ 3D software and having the images from the drone flying with DatuFly automatically, feeding the pictures through the DatuGram™3D and then generating the model that the surveyors and construction engineers can work with.

CEOCFO: What surprised you as you have been running the company?

Mr. Meirzon: I think that, maybe less of a surprise, but more of a thing that you bump into along the way, is that you need to go through a change process that requires a transformation, education and adaptation. That is because it is a totally new type of solution. People have their challenges and you have to teach them as you move. For instance, the challenges of regulations with drones, the challenges of how to make drones easy for people to fly; those are the type of challenges. I do not think it was a surprise, but more of something that we need to overcome as we go. I think that what we have today is actually overcoming the main barriers the people facing, which are our customers to be able to use our solutions.

CEOCFO: What is next? What is ahead for Datumate?

Mr. Meirzon: Ahead for Datumate is growing globally to become the leading, dominant player for our solutions in the US and globally. Our partnership with DJI will help us growing quicker to China and Europe. We believe in partnerships in this new growing echo system and will partner with more hardware and software partners from our market where we complement them with our values. The high-tech industry in Israel is very known, worldwide. However, there are very, few high-tech companies that have also a social agenda that is relevant for Israel, which is Jewish and Arab people working in the same company for the same cause. In Datumate this social agenda is part of the vision. Our company is combined fifty percent, more or less, of Jews and Arabs that are working in one company harmoniously and generating innovation and new revolutionary solutions. Our target is to succeed with our technology vision as a heterogeneous team and an example for others to follow.

CEOCFO: What are the challenges in bringing together two groups that have traditionally been opposed in a work environment? Why do you see this as a good way to change relationships, maybe one at a time?

Mr. Meirzon: The external environment composed of different cultures that are residing in the same country that is going sometimes through a friction between Arabs and Jews. We in Datumate believe that by bringing people to work together with the same mission close to each other, understanding each other in the day-to-day work is actually an excellent way to bring people to be closer to each other, understanding better the difficulties and cooperate better with each other. People have different deliberations, different attitudes and different holy days and we are trying to combine it all in one company and actually be productive with what we are doing. I think that we are doing something good in our small environment that can influence the general belief that Jews and Arabs can live in the same place and generate good value for this world from our mutual brain power.



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