Car2Go a popular car share program owned by Mercedes and operating in many countries including the U.S.

THE SHARING ECONOMY
and Its Place in Geospatial Services

Have you noticed a lot of new faces in our profession? New companies bringing new product offerings to the table? Transformative hardware in form, capability and cost. How about software as a service (SAS) or cloud based processing so simple it doesn't take a geospatial professional to understand and operate?

I remember my first Management Association of Private Photogrammetric Surveyors (MAPPS) meeting where I had the opportunity to do a presentation on Salesforce, touted as the first financially successful cloud based SAS model. Salesforce is a Client Relation Management (CRM) tool, that is still the most successful CRM in the market. This was the first introduction to many of us in the capabilities of the cloud. Soon after we learned of the processing power to be had in the cloud through products like Amazon Web Services (AWS) and a few traditional geospatial services providers began offloading computing over to these sites. However, up until very recently most continued to cling to the belief that computing hardware and processing capabilities were to remain physically within their domain.

So what does this have to do with the Sharing Economy? What is the Sharing Economy? The sharing economy is a term used to describe a movement toward among other things peer-to-peer-based sharing of access to goods

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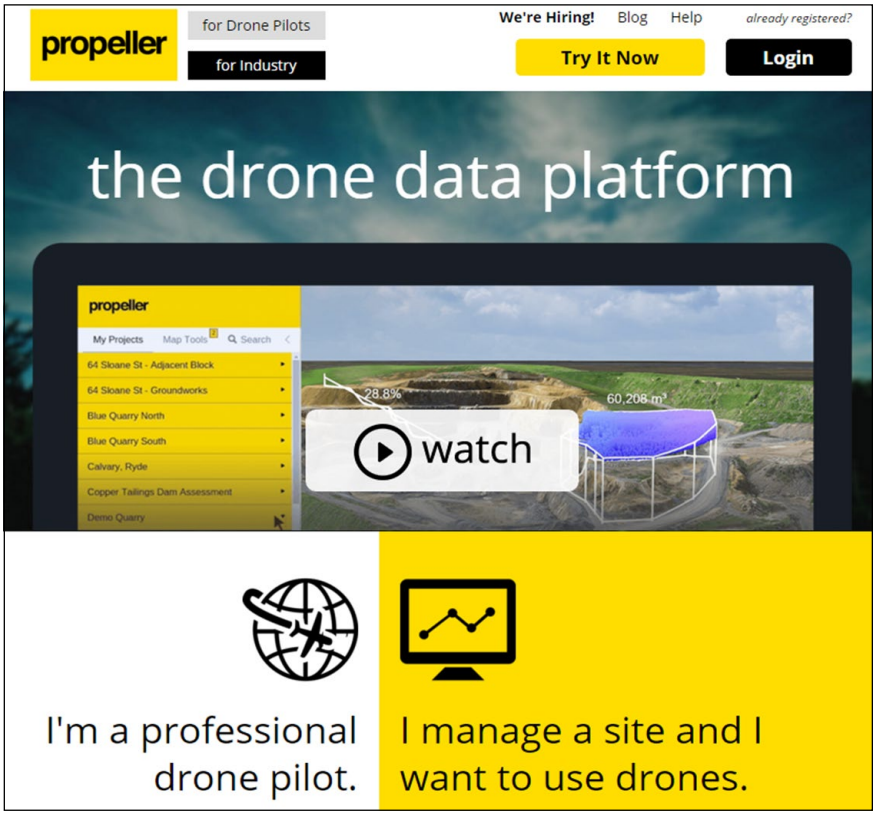
and/or services coordinated through community-based online services. The Sharing Economy is also described as Collaborative Consumption where assets are shared rather than individually owned. I first heard of this in the mid 2000's while in DC. I think I still had an IPod back then and was listening to a Podcast of a TED Talk. I know, I said it…TED Talk, just let it go. You all have skeletons in your closets as well. Anyway this one was on car sharing services and how they were going to revolutionize the way we move from place to place. This was before Uber by the way. I forget who the presenter was, but I do remember why she thought sharing services were going to be successful. Millennials were not going to fall for the same old mantra that we must own things to be happy. Rather they were more likely going spend their income on experiences and make use of assets at a fractional level. In the case of cars, why buy a car when 95% of the time it's sitting in the driveway. Why not use that existing asset in someone else's driveway by paying for it when in use. Car2Go, ZipCar and Uber are now prevalent and have brought the traditional cab companies to the brink of extinction in some cities. Another successful example of this model is Air BNB where property owners will rent out their homes or a room to travelers who prefer to not to stay in hotels.

When a group of people or generation become comfortable with an experience they tend to look for that same experience in other things they do. Those new people you see attending our conferences and meetings, they probably arrived via Uber or some other nontraditional means of transportation from a city full of entrepreneurs and investors where no problem is too difficult to solve. And when they found our profession many saw an opportunity to take the way they experience the world and apply it to what we do. Life to them should be as simple as an App. Can you imagine their surprise when they first sat down to look at what we would traditionally call geospatial mapping software? With tons of menus, file directories, maybe even some command line prompts, not to mention the computing power, infrastructure and storage requirements.

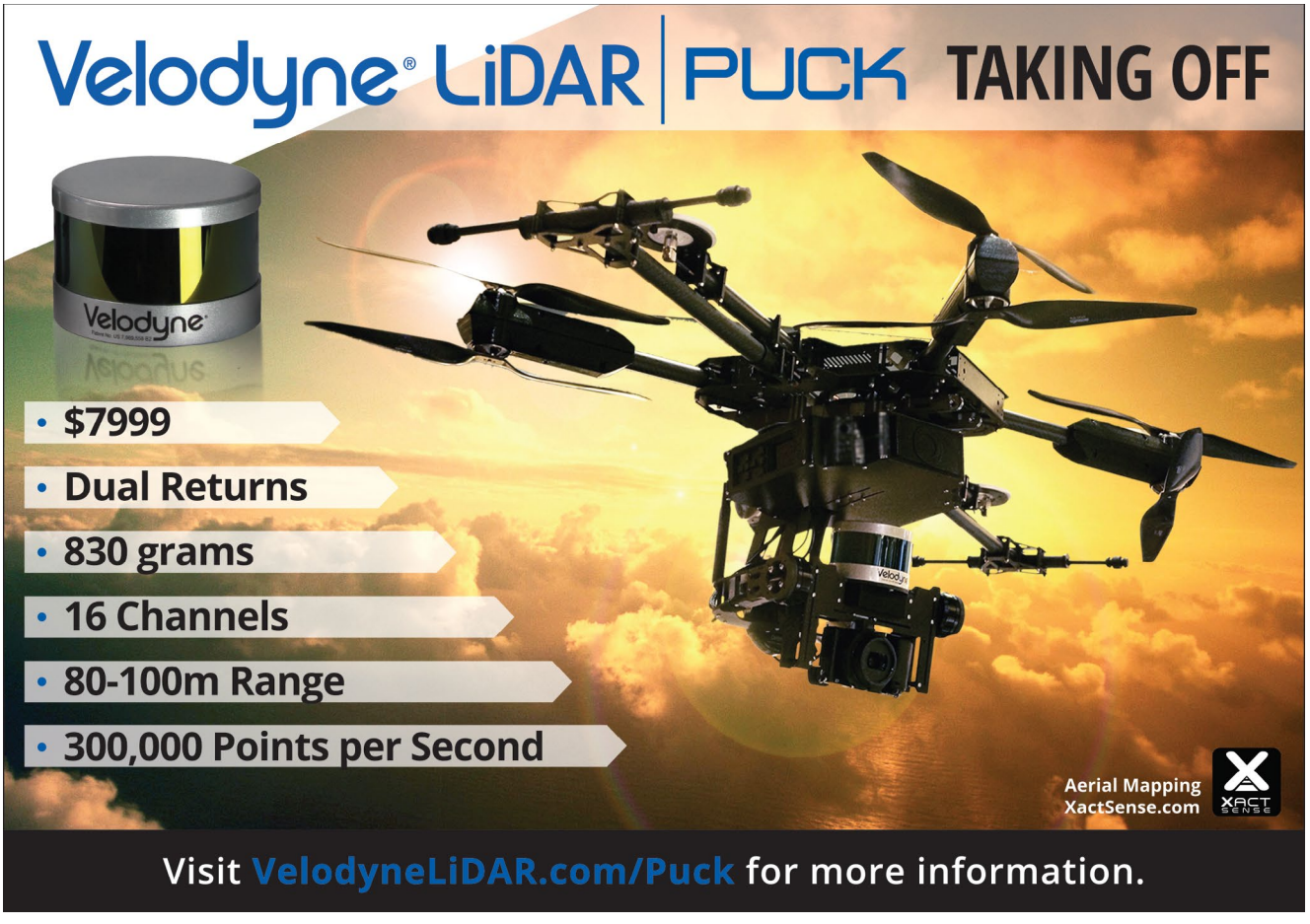


Propeller Aero offers, processing and hosting services for UAS based mapping companies.

We are seeing the changes begin to take place. Sure you can buy new geospatial processing software as a standalone product, but the arguments for doing so are becoming less and less defensible. Many new entrants to our profession will be making use of cloud based processing that is managed on the front end by user friendly web portals. More processing power than the average company can afford to maintain is right there in the cloud. New companies built around the processing power of the cloud such as Drone Deploy, Pix4D, Event 38, and Maps Made Easy have been designed to ingest your data and return deliverables. In most cases much faster than our clients have ever seen before. Other companies are offering a new spin, think Kespry, Sensefly, Trimble, and Precision Hawk that include a hardware model. Kespry's model is to lease you an acquisition system (UAS) and let it seamlessly upload and process out deliverables untouched by you. Of course only you can validate the quality and accuracy of

the data right? This too will soon be a product offering I'm sure.

So where does this leave our profession? I read a book recently called The New Geography of Jobs by Enrico Moretti which looks at why some cities prosper why others are doomed to fail. Of course there are many factors, but one that stood out to me was the makeup and mentality of those living in given city, mostly the blue collar ones where the unions had and/or still do have a hand in employment. Where fear of job loss to outsourcing or cheap foreign labor or new technology has been instilled nothing tends to change. So when jobs inevitably do go away the labor force has nothing to offer, they have not been trained, they have not taken opportunities to learn new skills, they become part of a spiral that doesn't change. In contrast you have places like Austin, TX and the Silicon Valley where a desire to live there is only fulfilled by employment opportunities that make it affordable, and that requires more than just a college education. It also requires those working in these cities to be adaptable, to be ready to give up comfortable positions when they become obsolete through lower labor costs or technology and move on to create the next new thing.

The new thing right now in the geospatial profession is democratization through lower cost acquisition tools and cloud based processing. We should embrace this, and not try to impede or halt it. Additionally, our role is to ensure standards and best practices are incorporated along the way. Not with a heavy hand or regulation, but with education and common sense. Imagine what you would do with the money saved in hardware, or hours saved in processing… others are. Will all of these new entrants succeed? No, but they will change our landscape going forward for the better.

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