

# MORE, FASTER... BETTER?



IN OUR QUEST TO ACQUIRE AS MUCH TIMELY DATA AS POSSIBLE, HAVE WE FORGOTTEN THE PURPOSE OF IT ALL?

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Peruse the marketing literature of many remote sensing companies and you'll notice that there's something of a competition going on, one that's being fought on several fronts. Inevitably, some will trumpet the fact they're tying into the latest data platform trend, whether it be a new UAV with a new type of camera, a small constellation satellite cube or lighter mount for a camera that enables an aeroplane to go where no plane has gone before. Whether the data comes from satellite, UAV or aeroplane, the resolution of that data, how well it's been georeferenced and in what bands is another focus of the sale pitch. Its timeliness is also all-important, with companies showing off how frequently they re-fly areas – or can re-fly an area if you want it.

All of which is good, of course. No one wants to be using inaccurate, out-of-date data. But very rarely do these companies discuss what will happen to the data next. To a certain extent, that's because it's either companies further down the 'value chain' who use that data to produce products or it's because the companies leave it up to us, the buyers, to decide what we want to do it.

But as Arjun Sheoran argues on page 42, has the industry as a whole lost track of the point of acquiring all this data? Rather than relying on a value chain to pick up the slack, do we need to have better integration and collaboration across the industry, so that data are acquired with the final purpose fully in mind – or at least with consideration paid to producing products that need far less effort on the part of the end-user?

Certainly, in this issue, we look at how remote sensing data is being put to good use, not merely acquired for the sake of having data. On page 36, Mary-Jo Wagner reports on how researchers in California were able to take UAV data and train a neural network to understand it. Within minutes, the network was able to distinguish trees from their backgrounds with 97% accuracy – vital information for citrus farmers in the US state.

On page 40, Tobias Leichtle explains how it's possible to use remote sensing data to determine how impervious the earth in an area is. Again, that's vital information for town planners worried about flooding, for example. Yet, at the moment, Leichtle's technique is waiting for the 'value chain' to adopt it. We can acquire all the data we want, but if we don't know how to interpret it – or we choose not to – all that data is for nothing.

Fortunately, projects such as the Urban Mobility Index show a way forward. On page 34, Karen Janssen explains how the UMI takes numerous datasets, including remote sensing information, from around the world to show how well developed dozens of cities are when it comes to mobility. The end users don't care exactly how the information was obtained – but they do need to understand it and be able to put it to good use, which is where the UMI comes in.

It's a salutary lesson to us all – unless we consider how what we produce can be used as we make it, it may end up never being used at all.

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