

5 Questions to...Jimmy Pewtress (Kullasoft)



Jimmy Pewtress is the founder of [Kullasoft](#), a software development company specialising in mobile apps for the geospatial industry. GIM International asked him 5 questions to find out more about the increasing role apps play in the land surveying industry.

Mobile apps have been identified as one of the new disruptors in the geomatics industry. To what extent do you agree?

I wouldn't say that mobile apps are disruptive to the extent that say Uber or Airbnb have revolutionised their respective industries. I think it will be a while before anybody who wants to can simply set themselves up as a surveyor armed with just a smartphone! I do agree, though, that there's scope for large-scale disruption of the traditional working

processes of the geomatics industry when it comes to things like data capture and transfer in the field, providing easy access to information, interacting with equipment and so on. Despite the rise of powerful technologies such as laser scanning and photogrammetry, I still come across surveyors and engineers who record site data in handwritten notes or using arbitrary solutions they've devised themselves. These all take time to decipher and process back at the office and it's areas like this where I know I can make a difference and add value.

Kullasoft creates mobile apps designed for surveyors. How do these apps help the surveyor?

The apps are really only half the story. At the heart of what we do is the Kulla web platform. This is a cloud-based system that stores the data collected by the apps in a central location, then allows access to that information by whoever needs it via a web browser. Mobile apps help surveyors out on site by providing a simple, standardised method of recording the work that they're doing, and a quick and easy way of exporting that information to a place where their colleagues can access it immediately. Back at base, having the survey data saved in a structured format means that we can create interfaces within the web portal that allow users to view and edit that information however they wish, create documentation from it if required and refer back to it in future. So it's more of an end-to-end system, with the apps acting as a data capture mechanism.

Which renowned survey companies are already using the app?

Plowman Craven are using our PGM Manager app to record data of all the control points they install, and then automatically create witness diagrams to supply to Network Rail as part of the required deliverables (see also [blog post and case study](#)). There are quite a few other UK survey companies who have set themselves up in the system for the free trial that we offer, so we hope to bring more people on board in due course. We have witness diagram templates built into the web portal for the Environment Agency, Network Rail and hopefully soon Historic England as well. We can easily reproduce bespoke templates for any in-house designs, so any survey companies that have to produce documented station descriptions can save themselves time and money.

Do you foresee other surveying tasks that can be carried out with apps?

Yes, lots! As I've been visiting and talking to people within the industry there have been many different ideas put forward that are an ideal fit for the end-to-end system I talked about before. Things like health and safety logs, risk assessments, time sheets, shift reports, manhole cards for United Utilities, lone worker check-ins, the list goes on. When it comes to the more technical aspects of geospatial work such as laser scanning, in-depth knowledge of the subject matter is required. The complexity and scale is such that a team of developers would be needed to build the products, plus the big players like Leica and Trimble develop their own software to complement their products. I'm a software developer first and foremost – my background isn't really in surveying – so there's going to be limits on what I can achieve. However, Kullasoft is positioned to provide solutions to all the time-consuming processes that have to be done alongside the main surveying tasks, giving people more time to concentrate on the job at hand.

Can we expect more apps from Kullasoft in the future?

Certainly! Now that the main platform is in place, we can quickly and easily add as many apps as we like, which can all upload their data to the same location. All we need to do is add the web interfaces so people can interact with the data and there's another useful tool for people to use. The longer-term vision is to build up a suite of apps that surveyors can pick or choose from, depending on their needs, in order to build up a diverse customer base.

The ideal scenario is to build products that will have a wide appeal across the industry, but I'm also open to bespoke development for individual companies if a niche product is required. Likewise it's possible to export data from our database into other systems. I always work to the philosophy of "If you can imagine it, you can build it", so if any of your readers have any ideas for mobile apps, or are just interested to find out more about what's on offer right now, I'd love to hear from them.

