Pioneering Location with an Out-of-the-box Approach



Interview with Kurt Daradics, Manager of the Startup Programme, Esri

(By Wim van Wegen, GIM International)

Esri recently exhibited at The Next Web Europe, a conference focused on entrepreneurship, technology and startups in Amsterdam, The Netherlands. But why was Esri involved? Is it looking for newfrontiers for spatial analysis? Is the developer market the group that will bring a fresh contribution to Esri's

startup and developer programme? GIM International spoke to Kurt Daradics, global leader of Esri's Emerging Business Group, to find out.

Kurt, we last met in April at The Next Web conference in Amsterdam. What were you doing there?

Esri has been sponsoring The Next Web for a few years now. <u>Boris Veldhuijzen van Zanten</u> at The Next Web has built up a wonderful community of 'good people', and they produce some of the best 'tech' events from a production and curated-community point of view. Plus, their media brand is doing very well. We'll be back next year again for sure.

There was a sizable Esri delegation: Nicholas Furness, developer evangelist, Lars Schmitz, Esri Germany, and Frank Holsmuller, regional marketing manager from Esri Europe. You seem to take The Next Web and similar events very seriously. What were your goals at the event?

Esri attends tech conferences like The Next Web to educate attendees on advancements in our platform and meet novel new startups. Esri has been in a public beta of esri.com/startups for a little while now, and attending events like The Next Web helps us find the best geo and mapping-related startups. At Esri, we have also created a estartup programme that helps software startups on the path to global success by giving them free three-year access to ArcGIS cloud services, software development tools, ready-to-use content, training, technical support, global partnership opportunities and co-marketing. This enables entrepreneurs to build mapping and location analytics capabilities into their products. Esri has innovated massively in the cloud and we're helping a wide array of companies across 60-plus industries solve an even wider array of problems.

TomTom, what3words and Esri were all present at The Next Web. Do you think events like The Next Web deserve more interest from the geomatics industry as a whole?

Now more than ever, it's about location, location, location. Today, even more so than when Gerardus Mercator helped us to capture the 3D world in 2D maps, we need to find ways to rationalise our multidimensional experience. Having a location strategy is critical – especially in the context of scalable, global commercial enterprises. The implications for geomatics and GIS are unprecedented. How exciting!

Lots of these events are also attended by 'geeks' who are 'ahead of the masses' when it comes to technology. Why are geeks so passionate about contributing to the world?

This is both a fun question and an important one. From my experience, geeks tend to be passionate and curious. They are driven by what moves them. I think many of the folks that are drawn to the tech industry also have a fascination for progress. We need more geeks, and we've been having fun with the #GeoGeeks hashtag.

You seem to be particularly interested in developers rather than traditional GIS professionals and enterprises. Why?

The command line is one of the most powerful inventions ever. Compound this with broadband infrastructure, stack maturation

and mainstream mobile supercomputing – this all sets the stage for unprecedented opportunities for geo-related cloud apps in both established enterprises and emerging markets. Esri has invested heavily in R&D to support the 'product-market fit' for developer tools. Resources, like the ones we offer at <u>developers.arcgis.com</u>, enable developers and startups to get going quickly with self-service account creation, solid documentation and robust code samples (e.g. <u>esri.github.io</u>). All of our efforts set the stage for startups to become highly scalable, and build broad awareness about Esri's commitment to this market.

With ArcGIS Esri has created a platform for mapping for the masses. What do you foresee as the ultimate impact of this?

Another important question, especially in the context of the 'masses' inside enterprise organisations. To highlight my point, Microsoft has embedded Esri Maps for Office. Now everyone that has Excel can make maps on the fly. Plus, Esri has developed lightweight apps like Collector that do not require formal GIS training to get into the GIS game, so there is an explosion in the enterprise market for location-based apps and having a 'location strategy.' Couple this with other tech trends like Big Data, the Internet of Things (IoT) and form factor innovation. Fast forward 10 years from now and we'll be more connected than ever imagined. Having said all that and to get to the heart of your question, I think that mapping technologies will play a vital role in helping humans rationalise this Big Data explosion. There is a principle called 'see, feel, change'. Humans are emotional and visual creatures. When we 'see' data on a map it triggers intuitive 'feelings' which drive action and 'change'. Imagine trying to gain those same insights looking at the same data presented in a .csv table – it's not going to happen, right?

Information and communication technologies are enabling cities to tackle many of their challenges, leading to the emergence of 'smart cities'. What is Esri's role in this development?

Esri's <u>smart communities</u> efforts, including our <u>hub programme</u>, are key examples of the innovation that Esri is delivering to this market. Esri works side by side with governments, big and small, to build smart communities – places where people feel safer, healthier and happier. Cities around the world are working with Esri to gain access to the entire ArcGIS platform, whether for just one department or across their organisation. Esri has 40-plus years of expertise and offers more than 150 apps that solve real-world problems for the economy, infrastructure, health and public safety (not to mention our partner ecosystem of <u>ArcGIS Marketplace</u> apps). These cities and communities have become part of our supportive user and partner community, and there is an emerging startup component to this work.

You are co-founder and director of business development at CitySourced. Can you tell us more about that?

I co-founded <u>CitySourced</u> in 2009 and it was my last startup prior to joining Esri. The basic idea of CitySourced is very simple. It started as a free mobile app where a citizen could download the app, and take photos of civic issues that needed to be fixed (e.g. vandalism, overgrown vegetation, road hazards, etc.). The report was delivered electronically to the city hall, along with the photo, latitude/longitude location of the issue and other metadata. The city could notify the mobile clients with status updates (e.g. issue resolved). The solution has evolved to a civic engagement platform, with other features like trash-pickup reminder notifications, city knowledge base and more. CitySourced achieved profitability quickly and already has over 250 clients globally. In 2012 I left to join Esri to build the startup programme, which Esri prototyped with companies like CitySourced.

It's part of Esri's vision to connect governments, industry leaders, academics and nongovernmental organisations with the analytical knowledge they need to make the critical decisions that shape the planet. How is the evolving GIS technology changing those needs?

The obvious line to draw here relates to Moore's Law, and form factors are getting smaller and more powerful. In fact, there's a new 'invisible' map. Esri has a geofencing solution called Esri GeoTrigger Service that triggers events like real-time location-based messaging and intelligence to iPhone and Android apps. For example, we have cities that are embedding this technology via our mobile SDKs (software development kits) into their mobile apps to push customer surveys on mobile devices to collect citizen feedback after visiting a physical city department. Other examples of GIS delivering insights include the data from fitness-tracker mobile apps. Cities are starting to partner with these sorts of companies to aggregate route data to help optimise public bike lanes, for example. It's one thing for an urban planner to make an educated guess (or even use GIS tools to model and predict traffic flows), but another dimension to layer on historical route data collected by these apps to better plan bike lanes.

Expanding on data visualisation and the 'see, feel, change' concept mentioned above, the innovation that Esri is delivering around 3D visualisations is novel, including 3D in the cloud, as well as virtual reality. We're working with a startup called InsiteVR that won the TechCrunch Hackathon last year using Esri's 3D tech with Oculus Rift to deliver virtual-reality visualisations of maximum building heights in urban environments. Another one of our startups, SmarterBetterCities, just announced USD1M financing to expand its 3D CloudCities libraries. These libraries further the vision of Esri founder Jack Dangermond on geodesign, which is a design framework and supporting technology for urban planning professionals to leverage geographic information, resulting in designs that more closely follow natural systems. My prediction is that geodesign will be Jack's legacy and gift to the world.

Is there anything else you would like to share with our readers?

We have about <u>200 startups</u> in our programme currently. We're seeing rapid product and client development with the startups that engage with Esri. If any *GIM International* readers have a product-focused idea that they want to develop please feel free to check out <u>esri.com/startups</u> and apply. Email us at <u>startups@esri.com</u> or engage with us via <u>@esristartups</u>.

Kurt Daradics

<u>Kurt Daradics</u> leads Esri's Emerging Business Group (<u>startup programme</u>) globally. Prior to joining Esri, he co-founded <u>CitySourced</u>, a mobile app for governments. Kurt is a mentor with <u>Code for America</u>, serves on the board of <u>Social Media Week LA</u>, and produces annual events for the Los Angeles tech community such as 'Social 25' and 'Digital Family Reunion'. E-mail: <u>kurt_daradics@esri.com</u>

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