FIRESIDE CHAT WITH
PETE WILKINSON

AS ESRI UK GEARS-UP FOR WHAT PROMISES TO BE AN ACTION-PACKED USER CONFERENCE, ITS NEW MANAGING DIRECTOR SHARES HIS THOUGHTS ON ISSUES THAT ARE LIKELY TO BE HIGH ON THE AGENDA … AND A WHOLE LOT MORE

GeoConnexion (GEO):. As someone who has been an Esri UK insider for the past 25 years, what do you see as the key factors to success in growing its business in the British Isles?

Pete Wilkinson (PW): For me there are two key factors that underpin Esri UK's success. Our people and our technology. When you combine this with our amazing customers, who have continued to innovate and use GIS in ever more creative ways, that goes a very long way to explain the company's growth.

The active development of the ArcGIS system plays a major role in Esri UK's business achievements. We invest significant amounts in developing our core products and over the last 25 years have been through several iterations of our platform, adding new capabilities and harnessing the latest technology. The company also has a singular focus on developing GIS and this core purpose has helped Esri UK to be the best GIS software and services company it can be.

Importantly, during this time we have also worked hard to make GIS more accessible at lower cost. For example, the opportunity to utilise ArcGIS Online in the cloud. We have introduced new audiences to GIS and worked closely with schools, universities, our customers and partners to ensure more people understand the value and benefits that geospatial technology can bring. A key aim is to grow the entire GIS sector and in doing so, create new opportunities for all.

In recent years the company has placed a particular focus on professional services and managed cloud services. Instrumental in changing how GIS is delivered to customers, Esri UK's managed cloud services are now the fastest growing part of the business. By hosting GIS in the cloud, it allows our customers to focus on using it to support their business objectives and worry less about the installation, configuration and operation of Enterprise GIS.

Our professional services group has doubled in size during the last five years and now comprises over 130 consultants, developers, architects and project managers. We aspire to have the best people to help our customers maximise their investment and use our significant experience in delivering solutions – from small agile projects to multi-year partnerships and programmes – to help our customers succeed.

Overall, Esri UK has doubled in size over the last seven years and is well-placed to continue on this trajectory.

GEO: What do you regard as the biggest business challenges – and opportunities – going forward?

PW: Spatial analysis and understanding location have never been more critical in helping to solve some of the major

challenges that we face across the planet and in our local communities. Our biggest challenge – and where we can have most impact – is to keep lowering the barriers to entry of GIS in terms of complexity and cost.

As we continue to make GIS more accessible to more people, with tools such as the cloud and mobile, it changes the relationship between users and the technology. They don't need to be IT experts to use it but can be true business users instead and this creates new audiences for geospatial.

Over the next few years, the company will be focusing on developing new solutions to make GIS even easier to use, through SaaS (software as a service) and the continuing development of AI and machine learning, to automate geospatial workflows and simplify how applications are built.

Raising awareness of what GIS can do outside of the geospatial industry is also a major ongoing task. There are many potential users out there who don't appreciate the power that taking a geographic approach can have on their organisation or business processes.

GEO: What emerging technologies do you feel will have the most impact on how you address future market needs and expectations?

PW: The company has made great progress in supporting large numbers of customers with their migration to online and mobile – we are seeing online GIS growing by around 30% a year, for example.

Esri UK will be delivering yet more products and capabilities via SaaS and developing automated workflows using AI and machine learning, to make sense of the huge amounts of real-time spatial data coming from IoT sensors and the proliferation of handheld devices. The cloud is making it easier to store and manage this data while AI is making it more meaningful. GIS can seek out spatial trends or automatically create valuable content which would otherwise have been lost in a deluge of content.

Esri UK is also working on broadening the relevance of GIS to users including Data Scientists and the developer community. Another area which will have significant impact on addressing market needs is creating further enterprise capabilities for large-scale GIS, with new approaches such as Kubernetes.

GEO: Of the many new software tools announced at this year's Esri Developer Summit, which grabbed your imagination the most?

PW: One of the tools which caught my attention was ArcGIS Reality, a suite of photogrammetry software products designed to enable reality capture workflows for sites,

cities and even countries, used to create the foundations of digital twins. Being able to turn drone and aerial imagery into visually stunning and highly accurate maps and 3D models, this tool lets users interact with a digital world that shows places and situations as they really are, layered with geospatial data that enriches reality with greater context.

ArcGIS Maps SDK for Unity and Unreal Engine are also interesting as they bring immersive, 3D experiences to the GIS world, no longer solely the domain of entertainment. Bringing static scenes to life, they provide the ability to add features such as dynamic weather, animated people, driving cars and trees swaying in the breeze to geospatial city scenes. The point of view can shift from street level to inside buildings, making virtual vantage points ideal for urban planning and other simulations.

Another noteworthy development is ArcGIS Knowledge, an important tool to reach into data science audiences with an approach they understand. Knowledge makes GIS technology more accessible to this group as it uses graph databases to analyse connections and relationships between different data sets in space and time. This offers exciting potential for new kinds of data discovery that can be used in supply chain analysis, disease tracking and crime analysis.

By taking advantage of the combined power of spatial and graph analytics, ArcGIS Knowledge can find hidden patterns in data quickly and show how people and things are interrelated. Esri UK sees this as a very important tool – one which is set to offer a significant enhancement to spatial data processing.

GEO: The company has a strong focus on supporting education in the UK at all levels. Will you be continuing (or expanding) this support?

PW: Nurturing and supporting the next generation of geographers and GIS experts is essential and the education sector is of huge importance to Esri UK. The geospatial sector is currently crying out for new people – particularly with the growth of sustainability, environmental and climate related industries. Learning geography and GIS skills can help students find fulfilling careers, empowering them to make the world a better place.

Our Education Programme provides free access to ArcGIS software, teaching resources and training for all UK schools and heavily discounted rates for universities and is currently used by over 3,000 schools and 135 universities.

Last year alone Esri UK trained 500 teachers to teach GIS more effectively.

GIS has been on the National Curriculum for over a decade, making lessons more

interactive and investigative, helping students to understand things more quickly but many teachers we talk to still struggle to use it. The latest version of our 'Teach with GIS' resources are designed to help fix this.

Other recent additions to our support include a collaboration with the Met Office on a set of climate change teaching resources, a 'Careers with GIS' website which tackles outdated stereotypes about careers in geography and becoming involved in the Department for Education's National Education Nature Park project.

This latest venture was created by the DfE to teach children about climate change and improve biodiversity across the country. Esri UK is providing its technology and expertise in biodiversity mapping to the Nature Park, first announced at COP26 by the Education Secretary.

The project will engage young people and teachers with nature, supporting them to play a driving role in mapping and monitoring biodiversity on their school grounds using citizen science and, critically, taking action to enhance it. The DfE believe this could play an important part in increasing biodiversity across the education estate and have a real impact on halting the decline of nature in England.

Environmental sustainability is at the heart of much of the work that Esri UK and our customers are involved in globally so we're particularly proud to be part of this project which closely reflects the core values of our business.

Favourite subject at school?
Geography and IT, so you could argue I've ended up in the perfect career!
Dream car? I don't have a dream car but I recently purchased my dream bike. Living in Cambridge there are limited opportunities for mountain biking but I do enjoy cross-country on my new gravel bike.
Favourite hobby/sport? I have played and coached hockey in Cambridge for over 30 years, and I love being outdoors so always look forward to skiing, cycling or hiking.
Dream holiday destination? I am a geographer at heart, so my ideal holiday destination would be Canada, New Zealand or Hawaii to see some of the stunning landscapes (for me you can't beat a glacier or volcano). I also love a good beach!
Favourite TV programme? Most of my time watching TV is focussed on live sport, particularly football, rugby and Formula 1
Little known fact? I play keyboards in the Esri UK band