



CONNECTING YOUR WORKFORCE AND ASSETS

FOR THOSE PREPARED TO EXPLOIT THE RECENT TECHNOLOGICAL DEVELOPMENTS THAT HAVE STREAMLINED LIVE TWO-WAY DATAFLOW, THE ADVANTAGES WILL BE HUGE... AND WHERE BETTER TO START THAN AT LONDON 2012 SAYS KOREC'S SALES AND MARKETING DIRECTOR, ANDREW BECKERSON.

London 2012 has been described as the biggest logistical operation in England since the Second World War and one thing is clear, when the Olympic Games arrive in London, so will 9 million expectant ticket holders.

Directly affected by this huge influx of visitors will be the five London 'Olympic' Boroughs of Newham, Hackney, Waltham Forest, Tower Hamlets and Greenwich whose host status will bring not only regeneration and visitor income, but also scrutiny and responsibility.

2009 has already proved to be a more critical business environment for councils and contractors with economic pressures pushing them to be ever more cost-effective and efficient in the way they collect, manage and maintain assets. I believe that this pressure will be the catalyst that influences the way they manage their workforce and assets. For anyone looking for a solution to meet tighter deadlines and an increased work load, often with reduced staff, then a simple change in work practices and a move to sharing data wirelessly could alleviate these pressures and even bring some unexpected benefits.

An infrastructure project as large as the Olympics is certainly going to have a knock on effect for everyone working in the affected London Boroughs, whether they are maintaining lighting columns, underground assets, fire hydrants and gullies or developing contingency plans for managing large crowds. If the first step in the process of effectively collecting and maintaining data and assets is moving from pen and paper based work practices to digital methods (those

making this initial switch cite an average increase in field and office productivity of at least 50%), then the next step is without a doubt, looking at the payback that wireless data sharing can bring. Imagine a complete two way data flow of work instructions, mapping, GIS data, photos, tasks... What could this mean for your fuel consumption, your efficiency, your costs and even the safety of your team in the field?

Wireless Benefits for the Mobile Workforce

Firstly, field workers would no longer be spending valuable time going to and from the office to pick up jobs and download data (see side box for potential savings), with the additional benefit of reducing environmental damage, fuels bills and congestion. A key factor in London's bid for the 2012 Games was sustainability and this will become an increasingly important element for contractors working on high profile contracts.

Field workers would also have access to all the data required for a job, useful for any asset management task, but absolutely vital when reacting to emergencies - any missing data could simply be wirelessly requested from a back office system. On completion of a job, data forms, notes, photos verifying completed work etc. can all be wirelessly transferred to the office with no need to physically visit the building or meet up with a supervisor. All employers have a 'duty of care' towards their staff and from a health and safety perspective, lone workers can have their movements tracked as they carry out their



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tasks. Field based software such as FastMap Mobile can incorporate a digital panic button that will alert the office if the lone worker feels under threat or is in difficulties.

The ability to constantly track field worker location activity also improves accountability. Not only can data capture productivity be monitored, but the allocation of tasks can now be done remotely, simply by searching for the nearest available field worker and wirelessly sending them any attendant information.

What's Changed?

Within the last two years, there have been several noteworthy developments in the technology required for wireless working. The arrival of 3G and 3.5G communication has significantly improved internet speed whilst the cost of sending data has dropped. This has given rise to a new age of mobile working underlined by the huge take up of devices such as the Smart Phone, iPhone or Blackberry. Multi-function devices are now commonplace and

Trimble's rugged Nomad G Series hand-held and popular Juno SC are perfect examples. The Juno SC has been designed and priced for equipping whole workforces, offers 2-5m GPS accuracy, a 3 mega pixel camera, internet access, a 3.5G cellular modem for data transfer and is fully compatible with a wide range of data capture and asset management software from Trimble's FastMap Mobile with its pre-definable forms and dropdown lists to specialist applications such as Symology's Insight Mobile Highways Asset and Maintenance software.

Additionally Ordnance Survey's OS Net, offering National 1-3cm 3d GPS coverage was fully upgraded in 2009 to receive both GPS+GLONASS data, plus Galileo when it becomes available. This enables far higher levels of positional accuracy in new and exciting areas such as automated vehicle control and marine applications, while increasing productivity through reducing the requirement for repeated site visits and multi-team/equipment survey teams.

Technology in the office has also been greatly simplified and running these processes is now a straightforward operation. Previously wireless working was thwarted by the need to gain access through a company firewall. The internet can now be used to manage the data in a 'cloud' on the web, without compromising the security of a corporate system. However, perhaps the hardest obstacle to overcome is resistance to change by those entrenched in practices that particularly suit their way of working. This is something that Trimble Professional Services, developers of mobile data capture and maintenance software FastMap iCapture, have successfully countered by offering a bespoke software service that exactly replicates existing work flow procedures.

Applications

Trimble Professional Services are constantly looking at ways to facilitate increased productivity and efficiency in mobile working, from simple enhancements to their FastMap software to extensive development that really delivers clear end user and company wide benefits. Trimble's Peter Lloyd explains, "We took a long hard look at how to increase productivity and efficiency in the field and how to really exploit the new technology that's available. I believe that wireless management of remote field workers and asset data is unquestionably the key to maximizing a worker's time on site and managing a mobile work force effectively. By using a system that combines the Trimble Juno SC with Trimble FastMap iCapture software, users really are maximizing the benefits that technology advancement can offer - the applications are almost limitless and easily adaptable for the sort of data collection and maintenance tasks that managing the Olympic site or assets that fall within the London Olympic Boroughs are likely to encounter. As an example, imagine that one of these Local Authorities is tasked with carrying out a 'Smartening Up' Campaign that involves a mobile inspector checking an area before the Games begin. If the mobile inspector spots some graffiti, he enters the "incident" using predefined forms stored on the Juno SC backed up with incident information such as location, material that the graffiti is sprayed on, whether it is offensive, is there a Tag (signature) etc. A photograph can also be added. This package of information is automatically sent to FastMap Live for display in the office using the latest wireless technology. Using FastMap Live, a Trimble hosted web service, office based workers can view an integrated data and map display showing all field workers, including the time and position of their last update and all incidents, including location, attributes, photographs and sketches. This information can then be used to assign a task to the most suitable remote field worker and a package of information relating to the job is sent wirelessly.

Andrew Beckerson, KOREC's Sales and Marketing Director, www.korecgroup.com

INTELLIGENT USE OF TECHNOLOGY

Scot Hutchinson, Sales and Marketing Manager at Symology Ltd. is in agreement that the Olympic Games can only benefit from the intelligent use of these developments. "Symology specialise in the supply of integrated asset management solutions to the Local Authority, Utility and Construction sectors. Keeping the disruption of works in and around the Olympic venues will be absolutely essential in the build-up to and during the games. The use of Symology's Insight Mobile



A 'package' of information, including a photograph, can be sent wirelessly from the field.

solution would enable any works to be inspected instantly, and the results to be passed back immediately to coordination officers. Importantly, this technology is tried and tested - Solihull Metropolitan Borough Council are currently using Insight Mobile on KOREC supplied Trimble Juno SC devices and is a perfect example of how to make a system really work for you. Insight Mobile enables users of standard Microsoft Windows mobile devices to interact remotely with the central Insight system. Solihull MBC's Network inspectors are therefore free to spend much more time in the field carrying out inspections, which cuts down travel and paper costs, and improves the timeliness and quality of the information collected. Inspectors can log the coordinates of defects on a graphical map interface, take photographs, perform risk assessments, raise works orders, update customer service requests and complete a range of different types of inspections and condition surveys. This is a fully integrated solution, all the data becomes available in the central Insight system, in near real time, using XML/SOAP web services over standard 3G or GPRS mobile networks. Although it is still early days, Solihull MBC reports that they can see a reduction in mileage, more inspections performed and faster processing of insurance claims with no extra paper costs incurred."

Peter Lloyd is a firm believer that when it comes to technology... "...it's not what you've got, it's how you use it." He continues, "The most compelling aspect of a system like FastMap iCapture on a Juno SC is that the applications are absolutely limitless. Just talking to some of the attendees at KOREC's recent GPS Tech days that focused on connecting a workforce and assets underlines this. Visitors specialized in areas as diverse as earthmoving, wildlife protection, police accident investigation and security. We also saw a wide range of traditional users of GPS and GIS in the form of Local Government, Utilities and Surveyors. All were looking for ways to take the next step in digital data capture and field worker efficiency.