



WHAT DOES THE FUTURE HOLD FOR CONSTRUCTION?

The “Connected Site” strategy is the answer that comes loud and clear from Trimble. But what is the Connected Site solution, who benefits and how is it relevant to the market?

The Connected Site™ strategy is Trimble’s vision of how the future construction environment will operate and underlines Trimble’s own move from a provider of products to a provider of solutions. It is a place where the application of advanced positioning and information technology plays a pivotal role in improving accuracy and productivity in all phases of the construction process – Feasibility - Planning – Building – Maintenance and Operating - with the ultimate aim of allowing all stakeholders in a project to share knowledge.

Trimble’s Mark Forrest explains. “The adoption of information technology around the world from airlines to banking has revolutionised the way they work. Up until now, construction has been a technology laggard. We are now moving into a different phase due to increasing competition within the industry and the general pervasiveness of technology in all aspects of our lives.”

Jim Veneziano continues, “Progressive customers understand the need to adopt a new and more productive way of working and are making the investment in computer power and communications. The Connected Site solution is scalable and has multiple entry points - contractors of any size can invest in as much or as little as they want from a broad range of options to get started.”

Mark is quick to point out that many contractors are already using a mix of Trimble GPS, construction lasers, total stations, wireless data communications, the Internet, and application software. As part of the Trimble Connected Site strategy, these solutions can be combined to provide a high-level of process and workflow integration from the design phase through to the finished project, delivering significant improvements in productivity throughout the construction lifecycle.

Trimble suggests three main entry points for the contractor depending on current need:

- Connecting Site Positioning Systems
- Connecting Grade Control Systems
- Connecting Mobile and Personal Assets

Mark concludes, “The benefits for the contractor are clear. They have the tools to increase productivity, save time, reduce costs, achieve higher accuracy and importantly deliver the same benefits to the job’s owner in the form of accurate, timely information, managed costs and reduced risk. These are the factors that win contracts in a competitive market. I can’t stress too highly that these benefits can be gained by even the smallest contractors – the key to the Connected Site solution is scalability and multiple points of entry.”



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What can Connecting my Site do for me?

- Reduce unnecessary travel time and fuel costs
- Keep operators in the field where they are most productive, and reduce machine downtime through remote machine diagnosis to increase utilization time
- Ensure all machines and site workers have the correct data as soon as it is available
- Ensure site workers are kept in synch with each other and in line with design changes from the engineer or data preparation team, and eliminate mistakes and rework caused by using wrong or out of date information
 - Control files
 - Surface files for volumes and laid material thickness checks
- Manage and organize project data over the life-time of a project
- Notify machine operators when design updates have been loaded into the machine control box
- Maintain firmware and software updates for the machine sensors and control box, keeping them up to date and eliminating incompatibilities between components which could affect machine performance
- Know where machines are, what they are doing, and which design they are working with at all times
- Real time production and soil compaction information is available from machines and site workers as soon as a task has been completed
 - Provides an up to the minute status of progress against schedules and status of cut/fill or compaction on each layer being constructed
 - Reduces the need for site measurement operations through use of production data from the machines on site
 - Better utilization of personnel and equipment assets

What can Connecting my Assets do for me?

- Improve equipment and personnel productivity and efficiency
- Check and control subcontractor activity
- Determine equipment utilization by project and by asset
 - Hours
 - Fuel burn rate (emissions control)
 - Idle time
 - Working time
- Review and manage load counts, cycle times and utilization in order to optimize performance
- Integrate the data from Trimble Construction Manager with your ERP or Dispatch system
 - Estimated arrival times, travel times, and on road times for permitting requirements
- Plan maintenance schedules, increase operating life and avoid unscheduled down time
- Warn when unplanned events occur
 - Out of hours ignition
 - Unplanned leaving a Geofenced area
- Manage operator or driver compliance
 - On road speeds
 - Uninterrupted hours of operation

To find out more about how Trimble Connected Site solutions can make your more competitive and profitable, contact your local Trimble dealer.

Lucy Hamilton of the [KOREC Group](#) spoke with Jim Venziano - General Manager Trimble Construction Division, and Mark Forrest - Business Manager Trimble Heavy and Highway Construction Business Area at Trimble Construction LIVE in Milford, UK June 2008. The above are excerpts from that interview.