

Mobile CAD Surveying Ltd

CAD Drawing & Surveying for Office & On Site

Productivity or Procrastination?

The future of CAD is MOBILE

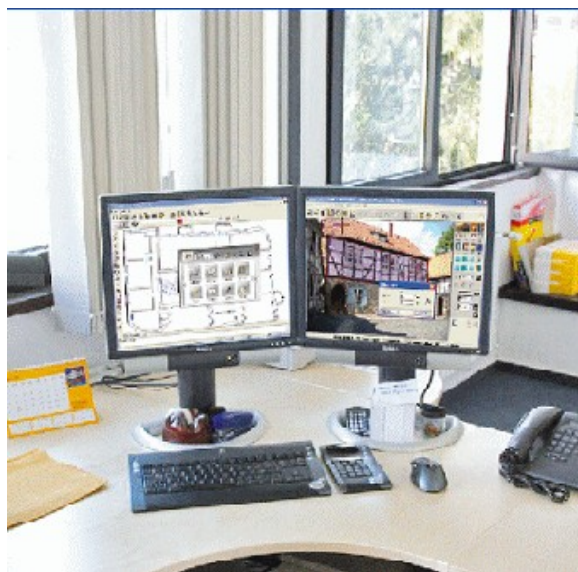
Isn't it amazing to think that just five years ago virtually all surveyors took pencil and pad, tape measure or possibly a laser measuring device out into the field and spent several hours measuring up sites, buildings and all related detail before returning to the office to redraw the detail into their CAD package. Or is it? How much has really changed?

History

Productivity levels and therefore profit margins are a concern to all, but in an industry where so much process is manual there only needs to be one error in measurement, or error in reading a measurement and the entire dimensions of a building will be inaccurate. The result? A return to site to re-measure and then back to the office to amend the CAD drawings. This is a huge resource cost and ultimately vastly decreases profit margins, affects customer service and increases costs for both the supplier and the client.

Anybody connected with design, construction, engineering, facilities management, manufacturing, mapping, real estate and related industries will know what we're talking about. Local authorities, hospitals, schools, surveyors, facilities management companies – any sector involved in the management of multiple and large buildings that require compliance with Health and Safety regulations, the Disability Discrimination Act (DDA), the Americans with Disabilities Act (ADA) and those requiring Asset Registry services began looking at how to shorten the "field-to-finish" time and associated cost.

So, how far has the adoption of [mobile CAD technology](#) come, and how easy has it been to bring the construction industry into the 21st century? Has mobile CAD continued with what Blackberry started – and truly taken the technology out of the office and into the field?



“In order to tempt the surveyor away from the traditional pen/paper/laser approach, any solution offered has to be quick, efficient and truly mobile. To persuade the money men it also has to offer a swift ROI - laser scanning options were seeing an increase in adoption a few years back but were still costly, and did not create the “as-built” drawings and floor plans in the field that would significantly cut design and planning time and cost.



The answer lies in incorporating handheld devices, software, Bluetooth and wireless technology – to produce a CAD drawing in front of your eyes. The measurements taken by laser meter and sent via Bluetooth into the software installed on the [handheld device](#), produce a pictorial representation almost instantly. Human error is completely eliminated – the surveyor can see immediately if he has taken the measurement incorrectly. The solution also needs to offer the basics for internal building design, down to such detail as furniture if required, thereby producing a finished drawing in the field that can be emailed back to the office.”

But doesn't all this technology send the average surveyor running for the safety of his pencil and pad?

“Admittedly the biggest challenge faced will be persuading all involved to undergo a complete culture change! From our experience this has been less of an issue in the USA, Australia and the Far East but across Europe those we see as potential adopters just don't



believe what can be achieved by implementing a [mobile CAD solution](#) until they actually see it in action, so uptake has been slower simply because it is harder to get through the door in the first place.”

And surely the age old excuse of months of training staff on CAD related technology and the affect this has on productivity gives the procrastinating client an immediate get out clause?

“It certainly raises its head. They are most surprised when we can demonstrate that users can be up to speed with our system in 2 days, and producing plans of the same standard as using traditional methods within one week. This is a huge cost saving when we look at how quickly the drawing is produced – using the “**point-shoot-drawn**” principle within a week the surveyor can be measuring 400-500 square metres per day, make that 750-1000 square metres in 3-4 weeks and as much as 1500 square metres per day for super users!”



“The UK gives us a good example of this. To comply with government directives, many local authorities are facing a race against time to ensure they have accurate up to date drawings for premises like schools and nursing homes as well as offices – a race they can never win using traditional surveying methods.”

“So much information needs to be collected by a variety of people – fire inspectors and asbestos surveyors for example need large amounts of data; asbestos and water hygiene issues in older public buildings cannot be determined unless accurate measured surveys exist and are kept up to date. The fact that many local authorities do not have accurate, (or in some cases ANY), plans for many of their public buildings, is under the spotlight.”

Fire regulations and new laws to improve access to buildings for people with disabilities have also raised the profile of property asset management in many parts of the world.



“If we say the output is 100% accurate in half the time and at half the cost we’re pretty close. Productivity in simple terms is increased by 100% - the work is delivered in one day – therefore the profit is increased by 100%. Mobile technology has actually been proven to increase productivity by up to 1000% when compared to traditional design methods. And that’s not mentioning the less tangible increase in service level to the customer. A return on investment can be seen in some cases on day 1, but we say on average within 14-15 working days, including the cost of the hardware, software and training.”



*“To illustrate; a subsidiary of T-COM measured and drew **more than 1 million square metres** - 13,778 rooms in 1,230 buildings across Germany. The target objective of the contract was not just measuring the exact area of the rooms with a tolerance of just 3% but also measuring mixed areas in just one "go". The project was completed using a team of 25 in just 15 weeks.”*

And the future?

“It is now possible to upload the finished drawing to a portal, and make it accessible from anywhere in the world, again increasing productivity by giving the client 24x7 global design capability at minimal cost.”

“Sector wise initial uptake by internal surveyors such as fire prevention, asbestos, asset management functions and disability access surveyors has been followed by planners and quantity surveyors needing accurate “lay of the land” drawings and external building representations in CAD. We see the internal surveying market continuing to increase, this is already evident in the USA, and the construction industry as being key in the future. Public services, as mentioned, and also utility companies and hospitals are all growth areas, plus banks in the USA as a result of ADA compliance. Geographically that change in culture is starting to happen across North America and Europe, and from Germany is spreading via the existing client base into Eastern Europe.”

Mobile CAD Surveying Ltd are the UK's main and Graeberts preferred dealers of the Graebert suite of software in the UK. For more information on the [Sitemaster Building software](#) or [Software and Hardware Bundles](#), please call us on **0844 567 2609** or email us at sales@mobilecadsurveying.co.uk

You can also download a [FREE trial of the software here](#) and also [Book a FREE Demonstration](#)

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