CCTV: Getting What You Want

WHOEVER you are, you try to avoid disappointments. You try to avoid feeling like a fool. Even if we've never met, how do I know this about you? Because you're a human too.

Take five minutes to read about something free which can help us steer clear of disappointments. I know it can help you, whatever your role in CCTV. For instance, if you're a CCTV sales person, as I once was, this will help you win business in spite of your competitors. If you're a CCTV installer this will help profits and win referrals. If you're a CCTV end-user this will help you get what you want. If you're a CCTV forensic analyst you can create more information from images. If you're a CCTV trainer you can better convey ideas to your students. If you're an independent CCTV consultant, as I have been for many years now, you can use these ideas with all of the people above and more. So, let's get to the crux of the matter.

The project architect already had this detailed 3D Sketchup model which we used for designing CCTV.

Years ago I was frightened my CCTV designs for fields-of-view would, when installed, fail to give my customer the images we intended because 2D plans ignore one vital factor. Views, blind spots, obstructions are all governed by the missing height details. If I was at fault I'd at best get egg on my face and a bad reputation. At worst, I'd lose a lot of money paying to have the installation corrected. So, I learned CAD to create 3D models with height. I can understand people's past reluctance to delve into this. But, and this is a J-Lo of a big but(t), now it is easy using incredibly good *free* software.

Google Sketchup is it. I have shown Sketchup to many, many people both CCTV folk and others. Quite simply everyone is gob-smacked by what you can do with it and how easily.

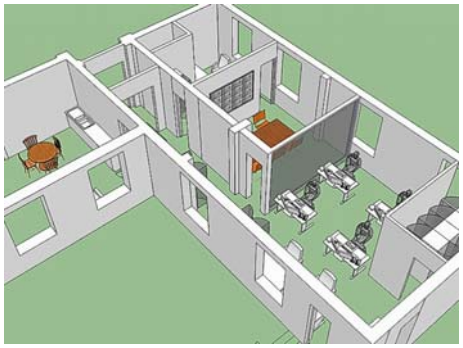
So, how can this idea be of any use to you? Here are some real examples from my work with a nod to all of the people in the roles that I listed at the top of this article. You are probably one of them.

The sales person who in their proposal to their prospective customer clearly illustrates the location and aesthetic appearance of cameras, IR, etc., on their cherished building surely has their understanding and confidence from the beginning. You can win business over cheaper competitors whose proposals remain a risky mystery to the customer.

Camera view from the location shown earlier. Limits of detail in this 576x720 pixel image are now plain.

A CCTV designer who before installation illustrates the view that each camera will really achieve can get a signed-off design from a non-technical customer without arcane Rotakin jargon bamboozling them. Then the installer knows exactly what images they have to achieve. They can spot design problems before they start work, which lower risk when they bid and improves profit. Best of all, the customer will pay their invoice promptly because they see the end result is clearly what they'd always expected. How valuable will their glowing reference be?

You can make Sketchup models from site drawings. The huge industrial facility shown below came as pdf plans which I imported into Sketchup, tracing new lines around key features such as the perimeter fences and then 'pulled up' to give them height. The main buildings were modeled from the elevation drawings. Generic items like the truck at the distant weighbridge and the traffic barriers at the car park were found free online in Google's '3D Warehouse' which is a vast repository of Sketchup models made by individuals like you. This whole site model was less than an afternoon's work that has paid dividends on this large project. This site has not been built yet, so planning the CCTV views alongside the client involves using the model on a laptop, setting a camera point in the model, say, 8m above the ground, setting the field-of-view, e.g. 30° and swiveling it using the mouse to see that the desired views are possible. Document the results and get a signed-off design before starting to write the tender specification. Cushty.



From floor plans to 3D that you can virtually walk through. Drag & drop to experiment with layouts.

If you don't have site drawings Sketchup allows you to create models from photographs too. Handy for realistic buildings, equipment racks, etc. Analyzing some CCTV footage for a forensic assignment I created a model of the crime scene from a video image. The scene could then be seen from other viewpoints. CSI:NY may be TV fantasy. This isn't.

If you're a CCTV manager who wants to remodel your area to accommodate the merging of a neighbouring control room, why not experiment with layout options using Sketchup? Your whole team can contribute at your exploratory roundtable meetings with the model being manipulated 'live' on the projector screen. So much faster than waiting days for each new idea's redesign to be done by those helpful furniture sales folk. Do it yourself.

If you're a trainer, if you're a consultant, you could find yourself doing any of the above things for your clients. That's what makes learning to use Sketchup productively such a satisfying thing, never dull, with tremendous pay-offs.

I am so excited that software this darned useful is freely available. It has proved so useful to me in my work over the years, now is the time to teach others how to use Sketchup for CCTV and security, especially more profitable business. Consequently, we will be running two-day courses early this summer. Day 1 will teach beginners how to model things using Sketchup, and Day 2 will show how to use it for CCTV design techniques. If you want to try it sooner and can't wait, call us now.
More overleaf. Details will be at our website:
www.lambert-associates.co.uk