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# Visualising Enviroments - Plowman Craven

**Author:** Marta Wren, Technical Specialist at Plowman Craven

**Organisations involved:** Plowman Craven

**Products used:** NCTech iSTAR & SiteSurveyor

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*[Marta Wren, Technical Specialist]*



Ph: Plowman Craven

Plowman Craven, in Harpenden, Hertfordshire, is one of the largest measurement survey companies in the UK. It specialises in providing laser scanning and measuring data services to both public and private sectors. Its operations are worldwide and has built its significant reputation on a raft of

projects ranging from Middle Eastern palaces to North African communication schemes and from some of the UK and Europe's major re-development programmes, prestigious property portfolios, national heritage measurement projects, existing and new-build shopping centres.

## Profile

Marta Wren is a technical specialist at Plowman Craven. Her role involves the implementation of new projects and workflows, staff training and research into new, dynamic ways of deploying laser scanning, photography and photogrammetry techniques. iSTAR has become an integral part within this workflow activity and under Marta's management, it has helped to streamline workflow in Plowman Craven's in-field operations.

## Real-time demonstration

Marta and her team were initially looking for a solution alternative to its manual 360 degree panoramic camera system and initially came across NCTech's iSTAR 360 degree panoramic camera through carrying out some intensive research. She was instantly impressed with the simplicity of use, coupled with its exceptional automation capability, as she explains:

"Before iSTAR, we would use a manual nodal ninja system and DSLR camera. Capture would involve manual rotation of the camera to capture 360 panorama and capturing each of the directions in multiple exposures. Post-processing would involve stitching of all photos in one panorama which would be mainly automatic with some exceptions. One key problem area for us was stitching."

"The nature of some objects we were capturing, such as featureless, plain walls did not give us adequate common point detection, but the automatic stitching process within iSTAR overcomes this."

"This, and the easiness of implementation amongst many users across our company due to the simplicity of the device and software, makes iSTAR an exceptionally good, robust device for us. We have around 40 surveyors and technicians who use iSTAR and who need to operate an effective system for 360 photography capture. They all have varying levels of photographic background and experience, but it took far less time to train them to use iSTAR and it's efficient from the first day of use."

Plowman Craven is using iSTAR for visualising environments, inspection, supporting CAD and modelling.

Occasionally, Marta and her team will use iSTAR for point cloud colouring but to fully implement that across the board, she believes she will need much smoother workflows via a direct integration with a destination software for scan data post-processing. She cites ease of use, quicker capture and an ability to connect to an application which allows indoor positioning as distinct advantages for her workflow management using iSTAR.

"NCTech makes my job easier in terms of the time I need to train staff. Equally, it makes our surveyors' job easier by removing time needed for fixing panoramas which were stitched incorrectly with the previous systems used. It also allows interactions on site with the device through the Site Surveyor application which reduces the time needed for presentation preparation."

## Integration a key factor

Marta values iSTAR's automatic stitching without the need for manual intervention which integrates with SiteSurveyor and the fact iSTAR has complete automatic exposure settings with HDR is particularly impressive to her and her team. She adds:

"All my colleagues who have used iSTAR have found the output quality excellent for all the work we undertake and moreover, our non-technical staff are amazed how easy it is to use."



## Excellent after sales and technical support

And what of the Edinburgh - based company? Have Plowman Craven been pleased with the after-sales and technical support?

"We have been delighted with NCTech's entire approach to working with us. Their response to any issues we have has been immediate. We had a small incident with an RTC battery which died and needed replacing."

"As we struggled to do it ourselves, we sent the unit back to Edinburgh and the turnaround time was minimal. We also had a screen replaced on one of the units but it was done within one day excluding shipping so the impact on unit productivity was minimal. It's a first class technical support service from NCTech.", says Marta.

Fulsome praise and an honest appraisal which underlines why iSTAR is best of class in its field.

NCTech greatly thanks Plowman Craven [www.plowmancraven.co.uk](http://www.plowmancraven.co.uk), especially Marta Wren for her collaboration in this Study Case.

For further information about iSTAR or NCTech software visit [www.nctechimaging.com](http://www.nctechimaging.com) or contact us [sales@nctechimaging.com](mailto:sales@nctechimaging.com)