

The M.O. “A London Date in Bangkok”

*The Mo-Sys Scan-to-Shoot Workflow
at Studio X Beyond*



Project Overview

A Virtual Production shoot at Studio X Beyond in Bangkok required photo-realistic virtual environments of recognisable London locations in less than twenty-four hours.

Photo-realistic environments of real-world locations have traditionally demanded time-intensive 3D creation, along with highly specialised modelling and optimisation skills, before they are ready for the stage.

Flying cast and crew from Thailand to the UK would have incurred immense costs. Instead, Mo-Sys scanned the locations in London and transferred the data to the studio team, who then shot a dinner-date scene against the digitised London backdrop in a single day.



Project Partners



Studio X Beyond
Virtual Production Studio and Content Producer



Mo-Sys
Workflow provider

Virtual Production at Studio X Beyond



Based in central Bangkok, Studio X Beyond is a Virtual Production studio positioned to support international productions “across Southeast Asia and beyond.”

The 300 sqm facility is built around a 240 sqm stage, with a 22.5m x 5.5m AOTO main LED wall, a 6m x 3m LED ceiling and an additional 4m x 3m movable LED screen.

An in-house Virtual Art Department, powered by sister company MOONJI, designs and optimises environments for film, commercials and music videos.



Studio X Beyond is exactly the kind of partner the Scan-to-Shoot workflow was developed for – a world-class LED stage serving ambitious international clients.

Their team already knew how to deliver high-level VP. What they needed was a faster route to real-world locations, without the time and cost of building them from scratch.



Florian Gallier – Global Head of Strategic Partnerships

The Scan-to-Shoot Workflow

Scan-to-Shoot is a hybrid location-capture workflow, combining LiDAR scanning with 3D Gaussian Splatting (3DGS) – a scene-creation technique that reconstructs real environments as photo-realistic, real-time 3D content.

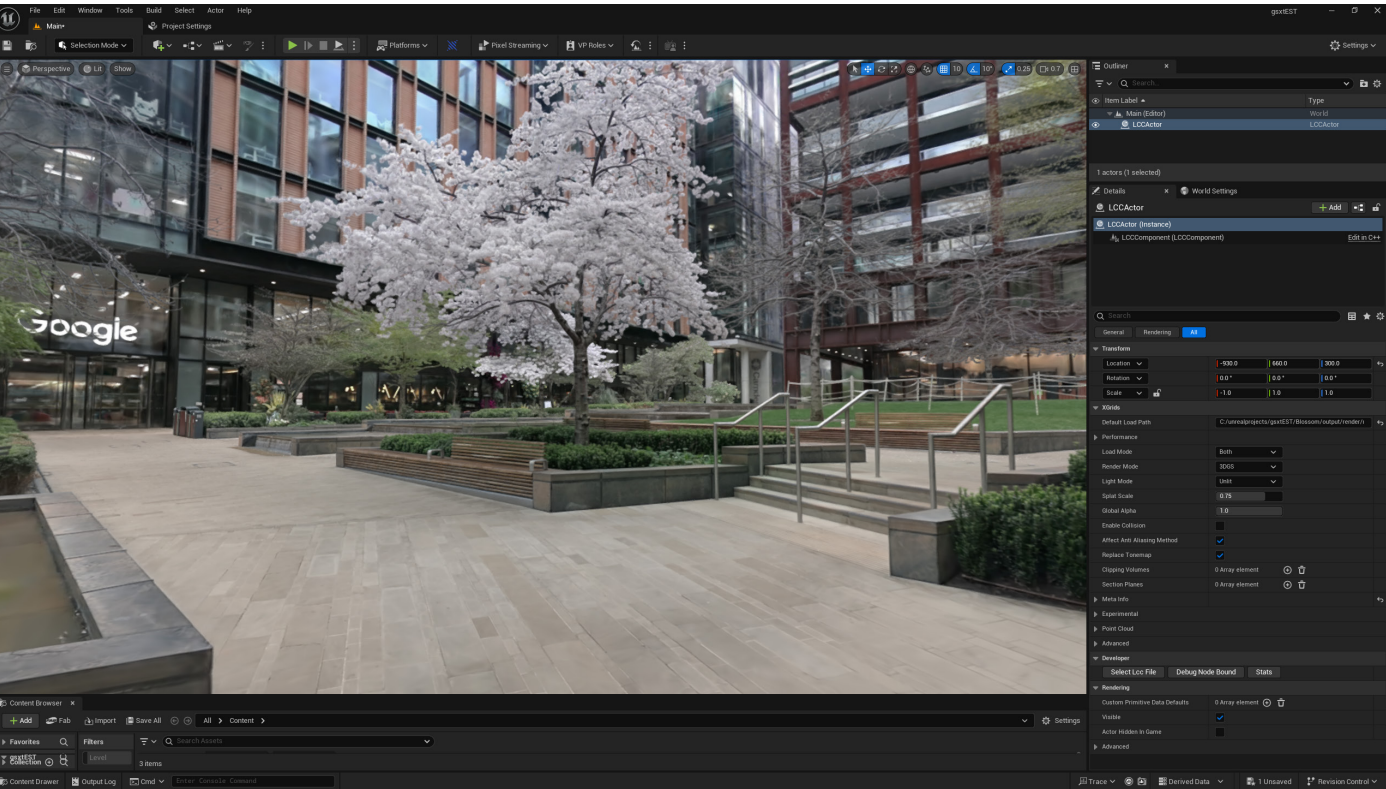
LiDAR captures precise spatial data, while 3DGS reproduces the colour, light and fine detail that make a location look real on camera.

Areas requiring ultra-high, close-up detail capture can be enhanced with additional stills image processing.

For this project, the London location scan took less than ten minutes.

The scanning data and stills images were combined in the processing software before transfer into Unreal Engine with Mo-Sys VP Pro, ready for real-time playback on the LED volume.

With Mo-Sys XR Set Extensions, the photo-realistic virtual environment continues beyond the physical edges of the LED wall. Filmmakers can shoot off the wall, out into the scanned location and back onto the wall seamlessly – unlocking more dynamic, engaging and dramatic camera moves, even in smaller LED facilities.



“Photogrammetry promised photo-real environments but proved too complex for production, and NeRFs were too slow to render. Gaussian Splatting gives us photo-real scenes that play back in real-time.

Pairing 3DGS with LiDAR data gives those scenes the accuracy they need to hold up in front of a tracked camera, and VP Pro gets them onto the wall without a specialist modelling team.

James Uren – Chief Technology Officer





Collaboration

Due to the extremely tight production window, Mo-Sys captured the London locations on behalf of the Studio X team, before transferring the scanned data to Bangkok.

Studio X Beyond, as Bangkok content producer, brought the scans onto its LED stage and staged the production – a couple sharing a dinner date, framed against a recognisable London backdrop.

Working six time zones apart, the two teams took the project from concept to delivery in a matter of days, without a single member of cast or crew travelling to the UK.

“At Studio X Beyond, speed and scale are part of our DNA - but this breakthrough workflow takes it to another level. We delivered a global production in days, not weeks, because with Virtual Production, the location really does come to us.”

Linda Lim – CEO, Studio X Beyond

The Outcome

“For years, photo-realistic Virtual Production has been constrained by time-intensive 3D creation workflows and the need for highly specialised modelling and optimisation skills. Our new scanning workflow changes all that.”

The London location was scanned in under ten minutes, and the scene was shot in a single day, with the finished production premiering at NAB Show 2025 in Las Vegas.

The project proved that photo-realistic, real-world environments no longer depend on lengthy 3D builds or specialist modelling skills. In-house teams can capture a location, process it and put it up on the wall in front of the camera in a fraction of the time – making Virtual Production more accessible and cost-effective for productions of all sizes.

For Studio X Beyond, it meant delivering a London shoot from Bangkok in days rather than weeks, without the cost of location travel.

Michael Geissler – CEO



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