Philip A. Crawley, career summary statement

I have 30 years of television / IT / digital-film engineering and have worked in studios, post-production, outside broadcast, transmission and data-centres. I am BBC ETSI qualified in broadcast engineering with my first degree in maths and programming. I have seen firsthand the very best and worst examples of television workflows and probably have a better understanding of current TV technology and practise than most engineers of my generation.

History

After graduation with an honours degree in maths and programming I spent five years at the BBC in the engineering department of Television News and Current Affairs, firstly at Lime Grove Studios and then at Television Centre and White City.

Since 1994 I have been running engineering departments in large TV facilities and latterly a leading Systems Integrator. My team has varied between a couple of engineers to dozens of wiremen and engineers.

Having run the technical sides of such productions as "Big Brother" and "Fame Academy" as well as PM'ing > £1m broadcast builds I feel my organisational record is second to none.

Having to run pre-sales, project management and hand-over training has given me excellent communication skills with both colleagues and customers. Additionally I deliver all of root6's training courses and present at trade shows, particularly in the area of IP networks and convergence.

I have maintained my interest in software – I wrote the ingest automation system for the in-house developed MAM used on *Big Brother* and currently implement custom hardware using the Arduino platform (development in C).

Working for a technical support provider for sixteen years (and leading tech support of those systems I have designed/delivered) means I am well aware of resource management for tech support teams.

Principle activities over last two years;

System Design and Project Management

I have designed and project managed the following jobs from pre-sales consultations with customers to workflow analysis/system requirements through to budget management, delivery, certification and training.

The last few years have seen me majoring on technologies required to relocate TV machine rooms to data centres – both in the serviced IP space and multiplexed fibre (uncompressed/low-latency) baseband space.

- NBC-Universal - as these two companies completed their merger they have amalgamated their television and film facilities into a single building in Central St Giles. I was responsible for all aspects of engineering across the various machine rooms, edit suites, audio studios and screening rooms. I introduced several new technologies including the Amulet KVM-over-IP system.
- Lagos TV, Nigeria - A 24-7 local TV station that wanted to start digitising its vast library of legacy recordings. As well as designing and building the archivists positions I delivered the shared storage using an online, nearline storage and a tape robot which integrated with the MAM. The complete system was tested and accepted by the customer in the UK and then I led the team in Lagos training the staff and adjusting final configuration.
- Arsenal TV - Since building their HD 4-camera virtual studio in 2011 I have continued to work with Arsenal as they progress to file-based delivery, and expanded website and taking many parts of their workflow back in house. This year has seen me build local and remote commentary facilities (at The Emirates as well as Highbury House), develop their own playout facilities and introduce shared storage for all their edit suites and encoding stations as well as redundancy with remote equipment between the stadium and post building over CWDM fibre.

- Chelsea TV - A refresh of their studio facilities to take them to HD for their Sky channel and re- purpose their SD studio to feed the pitch-side screens with richer content from graphics and EVS.
- ITV / 360 Media – A move from Quay Street in Manchester for this busy post production department saw me re-locate my team to Media City for six months of build/test/training for the customer's staff. We also introduced several technology changes to allow remote editing and more agile workflows.
- Technicolor – building their new post production centre in Pinewood Studio on a compressed timescale meant I had to manage a much larger wiring and engineering team and associated design/testing/handover schedule.
- Nebras Films – building Riyadh's first major 4K/HDR facility, supervising all staff on site and providing training for a multinational crew.

Training

As well as running the company's "Video and Audio 101", "QC for Television Deliverables" and "IP for broadcast engineers" training sessions for customers I routinely deliver a week's bespoke training to the Metropolitan Police's Forensic Lab's video engineering team as well as bespoke training for the media students at Ravensbourne.

Engineering

- I continue to be the company's authority on colourimetry; I provide advice to customers on colour workflow as well as calibrating and matching display types across different technologies.
- Bespoke fibre - In our efforts to provide optimal networking and infrastructure solutions I have developed the department's capabilities investing in new equipment and training. I have also designed and installed campus CWDM fibre infrastructures for Arsenal, and Chelsea FC as well as DCinema facilities (Dolby's uncompressed 4k CinemaNet around Soho is one of mine).
- Power - I continue to provide auditing and safety testing for mains power as well as championing the 17th Edition and best practise in mains configuration for film and TV facilities.
- Research – we have been commissioned by cable manufactures and test equipment suppliers to conduct research into the behaviour of 3Gbit as well as 4k/UHD/HDR video.
- Bespoke equipment – I have designed and implemented several novel solutions to common broadcast interface problems.