

Ten Years of Body Worn Video in Northamptonshire Police

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Abstract This article provides a commentary of Northamptonshire Police's 10 year body worn video (BWV) journey from a small pilot in 2006 to a highly developed position whereby BWV is culturally accepted and embedded across the force (with the exception of firearms officers). We can describe how a network of respected and influential 'Champions' positively promoted the use of BWV, demonstrated its value through operational use, and provided coaching support to drive the cultural acceptance and use. The availability of digital evidence is increasing and is growing in significance, and this brings with it a number of challenges. In order to combat this specific issue, Northamptonshire police have tried to create and maintain a device-agnostic BWV solution, which acknowledges that the technology is rapidly changing and requires flexibility. This is not unique to BWV technology, as these same issues exist in terms of mobile device extraction, CCTV, etc.

Through the development and maintenance of their own internal supporting infrastructure, Northamptonshire Police have developed and been able to operate this solution to good effect. This system has benefited many other areas where digital evidence is key, and has permitted us the ability to keep abreast of technological developments, while also being involved in national debate and industry working groups to help influence the progression and development of BWV. The Force operationally uses 10 different makes/models of camera that collectively provide a source of digital evidence alongside other 'independent digital witnesses', such as CCTV and mobile phone images. These are also in part stored and managed within the same supporting system. This provides enormous flexibility to those working within the Force, by permitting evidence to be downloaded at any terminal for investigators to view it at any other force computer, and to potentially share it with other agencies within the criminal justice system.

Northamptonshire is a rural county covering 913 square miles in the heart of England with a population of 710,000 residents. Sitting within the East Midlands Region, Northamptonshire Police has an establishment of 1,220 regular officers, 600 special constables, and 600 members of police staff.

This commentary provides an account of how the Force developed its body worn video (BWV) from a small pilot in 2006 to a fully integrated and culturally accepted device-agnostic system in 2016 that may inform other police forces in developing their BWV practices.

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Northamptonshire Police were participants in the first trial of BWV in 2006. This pilot involved the use of 90 head-mounted cameras that were introduced to officers across the Force. It is fair to say that this pilot was not a very successful attempt to introduce a new technology into the Force that officers embraced, nor did it deliver any real operational benefits. However, the learning from the experience was vital in how practices were subsequently developed and implemented, that now sees cameras personally issued across the Force that are fully embedded culturally, and regarded as essential as a radio or a pen by many officers and Police Community Support Officers (PCSOs).

A significant piece of learning was that the users need to recognise the need for BWV and want to use it.

Initial pilots involved head-mounted cameras that officers found uncomfortable to wear, involved wiring that was impractical, or may well have made officers feel self-conscious when patrolling the streets with a camera attached to their head. The supporting technology and administrative processes were cumbersome and off-putting. Being required to download evidence to two CDs, (a master and working copy) created additional administration burdens to officers who just wanted something simple and easy to use. The combination of the camera design and poor supporting processes were sufficient to dissuade the majority of users that any benefits were not worth the effort and many cameras were left unused.

A minority of users, however, did recognise the potential future benefits and continued to use the cameras on their daily patrols. This small group were influential in their roles and developed to become the basis for the BWV Champion's model. The Champions are positive advocates of BWV, promoting and demonstrating its use to colleagues, providing credibility and reassurance to colleagues arousing their interest in using the devices. Twice yearly briefings were introduced for the Champions to update them on new products and the Force's strategic thinking. A selection process was devised

that ensured anyone identified as a champion would represent the values of the BWV group, and the formal BWV Champions proved essential in making BWV the success it is now within Northamptonshire. Over time, these briefing sessions have been transformed into a more formal training session specifically for the Champions.

In 2010, proposals were developed and accepted to develop BWV. The allocated budget of £50,000 to purchase new cameras and create a small pool of devices available to officers was obviously important, but other supporting preparation developed from the knowledge gained in 2006 was more significant in furthering the use of BWV in Northamptonshire.

The policies around use were developed from observations of how it was being used, and feedback from users identified that body-mounted cameras were preferable for the majority. A data storage ecosystem was specifically allocated for BWV footage from the Force's existing IT infrastructure, and this saw the creation of a networked storage area where all officers could keep their own personally captured videos. It was also designed so that others across the Force could also access the footage via any connected Force's computer.

In order to best use the BWV Champions, and at the same time reward them for their support, they were used to help inform the policies and procedures. They were also used as product testers, which allowed them access to new and innovative equipment. They then became the trainers as they were heavily involved in all aspects of the project. As an embedded resource, they were then on hand to promote the technology, and also best practice in their areas that shifted us towards a culture of acceptance.

The development of a simple infrastructure and user-friendly practices were pivotal in increasing the awareness, support, and confidence of officers to use BWV, and the Force started to see benefits of BWV use emerge, primarily a reduction in complaints against police. As more cameras became available across the Force, we witnessed a pattern

emerge people would follow. Individuals differed in the time it would take them to complete the journey, normally between 12 and 18 months, but the journey was consistent.

1. I do not want a camera.
2. OK, I will have one but I will not use it.
3. I will use it if I have to.
4. I cannot patrol without my camera.
5. Please can I have a better camera.

While individuals progress along the journey at their own pace, it was observed but not quantified that the pace could be quickened by introducing additional cameras or through policy change. For example, when it was mandated that domestic abuse incidents should be recorded.

Technological advances of BWV cameras are rapid, and the growing desire to push boundaries and widen the quality and use of BWV technology is aligned to the direction the Force had established. The internally managed infrastructure is device-agnostic, so the Force is not restricted to any particular hardware that requires manufacturer specific software.

This allows flexibility in many ways, such as being able to test different devices live in the field to, to obtain prompt and meaningful feedback from experienced users. Also as we operate in many varied situations, it was quickly identified that there was no single device that could service the needs of all users in Force. Things such as lighting, officer capability, officer (or PCSO) role, network speeds, officer size, location, and setting were all considerations in terms of the devices issued. With a flexible model, we were able to test many different technical options from infra-red cameras, HD cameras, cameras with screens, etc. This resulted in the Force currently having 10 different makes/models, and in some cases officers were able to choose the camera that best suited their requirements.

The momentum of acceptance increased from 2012, when the biggest challenge was to meet the

demand from the workforce. More people were recognizing the benefits and wanted access to a camera. With a catalogue of examples of effective camera use, it was becoming more difficult for anyone to argue a negative impact of the technology. Examples were coming from within the organisation, as people from across the entire organisation began promoting the technology outside of the project, due to the very real benefits they had seen. Teams such as major crime, Child Protection, Hostage Negotiators, CID, Special Constabulary, Crime Scene Investigators, Custody staff, and police station front counters were all keen to showcase positive examples.

Benefits of the flexibility and efficiency of the processes developed can also be seen in the prompt distribution of 750 new cameras purchased as part of an East Midlands Regional Innovation Fund project. It took only 2 months from the date of delivery to have all of the new devices issued to officers across the county and operational, the majority of the time being spent on identifying and indexing each camera on Force's systems before issue.

Across the Force, responsibility for maintaining BWV and arranging repairs has been devolved to local commands so that all officers and PCSOs have a local contact in their Admin department to whom they can return and collect broken or new cameras. The devolvement of responsibility is extended to subject leads and the inclusion of BWV within their policy development. While guidance on what can or cannot be achieved by BWV and the impact a policy may have on the Force's IT infrastructure is provided by the E-Forensics Team, the operational BWV aspects of the policy are developed by the relevant subject matter experts so that they best reflect the needs of the user within the context the cameras are being used. For example, the management of sex offenders, domestic abuse, and stop and search.

Not everything is perfect and there are still some challenges. Data upload speeds are critical in ensuring officers are using their time as efficiently as

possible. At the police stations in urban areas where there are speeds of up to 100 Mbps, this is not a problem and most footage can be uploaded within a minute or two, but in the more rural areas where the national broadband infrastructure is not as quick, this can be an issue with upload times being significantly longer and at the same time flood their network link with data. The mitigation in these police stations is that there are fewer people working there so the wider impact on the overall efficiency of the station is not impacted on.

The other significant issue is data storage space. As the definition of cameras increases and officers use their cameras more frequently, there is an apparently ever increasing requirement for more storage space. Over time, as files are deleted according to Management of Police Information guidance, it is possible that a stabilising of the necessary storage space required for a given number of cameras/officer can be achieved, but predicting when this will be is challenging at best.

Looking forward we envisage the continual rapid development of BWV technology integrated within other hardware devices, and a wider use of digital evidence acting as an additional independent witness that can be instantly shared across CJS Partners. This would permit prompt, fully informed disposal decisions, the efficient disclosure of evidence to defence council and the use within the courts to reduce delays in the system and provide prompter justice. This will be drawn not just from BWV but other fixed and portable devices that are used by the general public, businesses, security systems, and police officers.

Over the 10 years, Northamptonshire Police have been using and developing BWV. Some key

learning has emerged that in our experience are crucial in introducing BWV so it is fully embedded and culturally accepted.

- Operational policy on the use of BWV should be developed around the officers' experience in the field.
- Processes around the use of BWV, saving and transferring data should be simple and quick.
- IT infrastructure is a significant consideration, in particular download speeds that should be quick to not cause unnecessary delay or abstraction from other duties.
- Data storage capacity needs to have flexibility to grow as BWV usage and file sizes grow.
- Competent, passionate, and respected advocates who use BWV in the field play a significant part in promoting the use and acceptance of BWV by colleagues.
- Users appear to travel along a journey to acceptance that can be accelerated with some injections, but our suggestion would be that the previous learning points need to be in place first.
- It is desirable to have systems that are open to future development and wider sharing with other agencies and media types.

We believe the investments and developments made by Northamptonshire Police to date place the Force in an enviable position to react and respond quickly to these innovations as they emerge. It has also ensured that BWV is now, effectively, business as usual.