

JEDI KNIGHTS WANTED: APPLY WITHIN

by

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The Command College Futures Study Project is a FUTURES study of a particular emerging issue of relevance to law enforcement. Its purpose is NOT to predict the future; rather, to project a variety of possible scenarios useful for strategic planning in anticipation of the emerging landscape facing policing organizations.

This journal article was created using the futures forecasting process of Command College and its outcomes. Defining the future differs from analyzing the past, because it has not yet happened. In this article, methodologies have been used to discern useful alternatives to enhance the success of planners and leaders in their response to a range of possible future environments.

Managing the future means influencing it—creating, constraining and adapting to emerging trends and events in a way that optimizes the opportunities and minimizes the threats of relevance to the profession.

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In 1977, the world was amazed to see the imagination of George Lucas come to life on the screen with the release of Star Wars. Early in the movie, Princess Lei makes an impassioned plea for help to Obi Wan Kenobi, the Master of the Jedi Knights. This plea for help was not made in the traditional manner of face to face contact or through simple verbal communication via a telephone or radio. Instead a three dimensional holographic image of the Princess was recorded and then projected from an android which had sought out Obi Wan Kenobi. In this movie lies the technology which may influence the potential future for law enforcement throughout the State of California.

Before you rush to the Chief with a new training program where light sabers will replace traditional side arms or suggest that X-Wing fighters should be included in next year's budget, consider how the technology of holographs could make a substantial impact on the manner in which courtroom, specifically traffic courtroom, testimony will be conducted in the future.

The current method used for the adjudication of contested traffic citations has changed little in the past 75 years. A violation is observed and an officer issues a citation. If the violator desires to challenge the citation, they make a court appearance and post bail with a future trial date being assigned. On the trial date, the violator and officer appear, wait for the case to be called and then offer testimony to allow the judge to render a decision. For the violator, this is a cumbersome and inconvenient method which frequently requires them to take multiple days off from work to physically attend traffic court. For the involved officer, this system results in one of two scenarios; if the officer is on a regular shift at the time of the court appearance, this court

appearance effectively removes an officer from an assigned patrol area for up to several hours. For the officer who is off duty, this appearance will potentially disrupt family plans and rest periods and will result in a financial burden to the employing agency in the form of overtime and travel costs. The only significant advancement in traffic court adjudication has been the adoption of a “Trial by Declaration” process in 1998, enabling both the violator and officer to provide written statements to the trial judge for adjudication (Law Link, 2008). While this process does provide for easier access to the adjudication process, it can only be initiated by the violator which makes it unreliable for law enforcement agencies when they attempt to reduce costs associated with traffic court appearance. The hopes, by law enforcement agencies, that the “Trial by Declaration” process will reduce costs associated by traffic court appearance is further negated by the violator’s right to request a “Trial de Novo” (New Trial) if they are found guilty during the “Trial by Declaration”, thus requiring the officer’s appearance (Law Link, 2008).

Look towards 2025 and examine how this same adjudication process could be utilized. Violations are still observed by officers and traffic citations are issued to violators along with a range of court dates. The violator, at a time and place which is convenient for them, utilizes the holographic application on their smart phone to appear in court to enter a “not guilty” plea. The violator’s bail is automatically deducted from their debit card and a trial date is established. On the date of the trial, both the violator and issuing officer use their smart phone holographic application to “enter” the courtroom. Should there be any delays at the courtroom due to other cases or other reasons, both the violator and officer can continue with their day until the traffic judge is available. When the judge is available, the violator and officer are alerted and they both provide their testimony to the judge. The holographic projectors within each person’s smart phone will display the other two participants in front of them allowing them to observe the

demeanor of each participant while testimony is given. Should there be photographic or audio/video evidence to be presented; this would also be presented via holograms for viewing by all involved. With the final adjudication, the violator has had the opportunity to state their case without prolonged absences from work or other activities. For the officer who is on duty, this “appearance” in traffic court has resulted in a 10-15 minute activity unlike the in-person appearance required today which results in the officer being away an hour or more. For the officer who is off duty, this holographic traffic court appearance allows for family outings to continue without interruption and eliminates the need to physically travel from their residence to the court and return.

Fantasy? Something only found in a Hollywood soundstage or in the scotch soaked mind of a dreamer? Hardly. The two aspects of this change in courtroom testimony; holographic technology and utilization of virtual courts, have been around for some time and are continuing to improve.

Technological Advances

Holographic technology has advanced to the point that it is being used in everyday life. In the Manchester airport in England, pre-recorded projections of holographic images are utilized to impart information to passengers regarding security screening issues. The images projected are so realistic that passengers are upset when they try to interact with them and receive no response to their questions! (Reuters, 2011) England further utilizes holographic projections to greet staff and patients at University College Hospital in an effort to encourage proper infection control procedures. It is anticipated that the use of these holograms will expand within the hospital to provide a variety of information to patients and visitors. (Interserve.com, 2012)

Further demonstrations by a team from Massachusetts Institute of Technology (MIT) have shown that the technology needed to actually transmit a holographic image to a different location exists today. While the MIT demonstration was cobbled together in a matter of weeks from readily available equipment and had poor image quality, others have taken the technology further. ICT Graphics demonstrated a system which allows for holographic teleconferencing to another location in real time. (Singularityhub, 2009) During the 2012 electronic products show in Europe, a three dimensional holographic image was debuted from a laptop computer with all components needed being contained within the laptop. Continuing improvements in technology will no doubt eliminate these shortcomings and make holographs a more commonplace item.

One researcher, Nasser Peyghambarian at the University of Arizona in Tucson, expects “face to face conversations” using holographic technology by 2020 and widespread commercial applications by 2017. (New Scientist Magazine, November 2010) This technology has been further advanced by MasterImage 3D who is developing a projection system which will allow for the projection of 3-D holograms from smartphones. (MobileDia, 2011) While it can be reasonable to anticipate this technology will be a boon to the entertainment industry in the form of televisions and movies, will this technology also have the same popularity within the California Traffic Court system? Some would say “yes”.

Chancellor and Professor of Law at the College of William & Mary School in Virginia Fredric Lederer (1999), feels that the popularity of a virtual traffic courtroom would be popular with the public, stating “In the simplest criminal case, a minor traffic infraction, a virtual courtroom would be easy to create and likely regarded as a blessing to most”. Lederer points out the advantages to the public in challenging a traffic ticket using remote equipment thereby eliminating the need to take substantial time off from work to physically attend traffic court. His

view of the virtual traffic courtroom includes having any fines/forfeitures being electronically transferred from the violator's bank account.

Virtual courts, utilizing various web-based technologies, have been evaluated and utilized in the civil court system previously. While these tests have validated the potential cost savings realized by not requiring the physical appearance of witnesses, these cost savings appear to be contingent upon having the infrastructure already in place. In the United Kingdom, courtrooms utilize video conferencing during arraignments in an effort to eliminate costs associated with the transportation of prisoners to the courtroom for a 15 minute appearance (The Telegraph, 2009). When first envisioned, this system was estimated to provide £10 million in savings over 10 years. What has actually happened is a net increase of approximately £250 per case since this system began use. This increase is attributed to the high cost of initially installing the secure video system needed (The Telegraph, 2010). Had the court system utilized an existing web-based system, the initial costs would have been eliminated or greatly reduced resulting in the desired cost savings.

In Australia, trials conducted as 'electronic trials' have ordinarily run with the assistance of commercial service providers, with the associated costs being borne by the parties. However, an innovative approach has been taken by the courts in Queensland. In October 2007 Queensland became the first Australian jurisdiction to develop its own court-provided technology, to facilitate the conduct of an electronic trial. This technology was first used in the conduct of civil trials. The use of the technology in the civil sphere highlighted its benefits and, more significantly, demonstrated the potential to achieve much greater efficiencies. The Queensland courts have now gone further, using the court-provided technology in the high profile criminal trial of R v Hargraves, Hargraves and Stoten, in which the three accused were tried for

conspiracy to defraud the Commonwealth of Australia of about \$3.7 million in taxes. The representatives for all parties involved in this trial acknowledged, without reservation, that the use of the technology at trial produced considerable overall efficiencies and costs savings. The experience in this trial also demonstrates the benefits of trial technology for the criminal justice process are greater than those for civil litigation. It shows that, when skillfully employed, trial technology presents opportunities to enhance the fairness of trials for accused persons as demonstrated by the immediate access to real-time transcripts. Both attorneys and the judge had the ability to instantly access all transcripts from testimony given and search for specific wording. This enabled both the prosecution and defense the opportunity to effectively cross-examine witnesses without relying on notes or continual re-reading of testimony by the court reporter. All representatives in this endeavor encouraged governments, courts and the judiciary in all jurisdictions to continue their efforts to promote change, and to introduce mechanisms to facilitate more broadly a shift from the entrenched paper-based approach to both criminal and civil procedure to one which embraces more broadly the enormous benefits trial technology has to offer. (Jackson, S., 2010)

In the United States, technology within the court system continues to evolve. Division Two of the Arizona Court of Appeals has adopted a fully integrated digital information system which allows for the instant access to files and legal documents (Espinosa, J.G, 2010). This paperless system has resulted in a more efficient courtroom atmosphere and has had the additional benefit of raising awareness of using technology in the courtroom without the need to physically produce witnesses to introduce evidence. The costs associated with the development and initial implementation of this electronic system have been offset by the cost savings realized by the increased efficiency of the court.

Frederic Lederer, Chancellor and Professor of Law at the College of William & Mary School in Virginia founded the Courtroom 21 Project to examine the use of technologies within the courtroom. Courtroom 21's 2002 laboratory trial was a mock federal homicide prosecution of a medical device company accused of manufacturing a stent that it knew or should have known would kill its first patient. That case included the first known use of holographic evidence (allowing the circulatory system to be seen in three dimensions in the air in front of each juror) and immersive virtual reality.

Defense claimed the patient's death was due to the malpractice of the chief surgeon. The credibility of the defense witness, a nurse, depended upon whether she had been able to see the surgeon's wrists during the implantation operation. A team of scientists from the University of Santa Barbara recreated the operating room in the computer. Each witness donned a special headset that displayed the operating room. The witness could move about the courtroom, lean over, twist, or nod, and see what he or she would have seen if in the operating room. The jury, other trial participants, and observers saw what the witness was viewing on a large screen. As it turned out, the defense witness was unable to see the doctor's wrists from where she stood during the critical part of the surgery; totally discrediting her testimony. Lederer notes "...a growing number of courtrooms nationwide offer counsel built-in, permanently installed technology." (Lederer, 2005)

Will holographic testimony meet the standards of the 6th Amendment and the so-called "Confrontation Clause" which provides that "In all criminal prosecutions, the accused shall enjoy the right to be confronted with witnesses against him" (Harrell vs. State, 1998)? For traffic court proceedings, this standard will most likely be met as most traffic related charges are not considered to be criminal in nature. Should the standard for the "Confrontation Clause" be

extended to traffic court proceedings, the question of holographic testimony will ultimately be determined by the California State Supreme Court and/or the United State Supreme Court. This question has been partially examined by the Florida Supreme Court in the State of Florida v. Harrell, 709 So. 2nd 1364 (Fla), where the acceptance of an electronic representation of a witness at a criminal trial was allowed.

In this case, the victims (witnesses) from Argentina testified via a satellite video transmission. The Florida Supreme Court was specifically urged by the State to conclude that "...the satellite procedure in this case is the equivalent of physical, face-to-face confrontation". The Court declined to do so, stating "Perhaps the 'virtual courtroom' will someday be the norm in the coming millennium; for now, we do not conclude that virtual presence is the equivalent of physical presence for the purposes of the Confrontation Clause". While the Court ruled that the satellite testimony was allowable in this case, it was only due to the specifics of the circumstances; in this case extreme poor health of one of the witnesses which precluded travel from Argentina to Florida. With this ruling, the Court continued to express concerns regarding the defendant's ability to have an opportunity to effectively cross-examine the witness and the jury's ability to adequately observe the witness's demeanor during testimony and subsequent cross-examination.

Conclusion

With the ongoing breakthroughs in holographic technology combined with the public's desire for cost effective law enforcement along with their own ease of access to the court system, it is not far-fetched to anticipate a holographic testimony system for California Traffic Courts being a workable and widely accepted form of testimony in the next 20 years. The advance of

technology has moved from the public's acceptance of it to one of perceived necessity. This desire for almost instant access to all aspects of one's life will no doubt carry over into the California traffic court system.

With the implementation of this new technology, there will come resistance. This resistance will likely be in the form of complaints from various law enforcement unions. Most law enforcement unions have entered into collective bargaining agreements to specifically address compensation for the attendance at court for off-duty personnel. With a change in the manner in which off-duty officers would attend court from physical attendance to holographic attendance, will come the need to effectively negotiate new standards for the compensation of off-duty officers. In order to successfully negotiate these changes, both labor unions and law enforcement management must accept that this change will come and be willing to off-set the potential monetary losses by other means. The time to begin these negotiations is not the day before the technology is thrust upon us, but in the months and years preceding this change. Address this potential change early and often to your labor representatives to avoid conflict at the last minute.

The time is now to be examining these future technologies and taking an active role in their implementation and development. Are you ready to be a Jedi Knight who will embrace and fight for future technologies to lead the law enforcement profession into the next century? Or will you give into the dark side of the Force and sit idly by and allow others to dictate your future? The path of the Jedi Knight is not the easy or safe path, but it is the correct path. Be the Jedi Knight.

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