

Presentation Technology: Coming to a Court Near You

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This summer, it was not only Pixar Studios jumping into the 3D fray. Along with the cache of summer movies like *Up*, *Ice Age 3: Dawn of the Dinosaurs* and *G-Force* offered in stunning color, depth and motion, courts are entering the animation arena.

They are also getting on board with evidence presentation technology, digital recorders and large screen hi-def monitors. Jurors are beginning to expect it, industry insiders say. And it's becoming more affordable, more reliable and more adaptable to the court.

There's a trend away from physical modeling, and animation in courtrooms is beginning to catch on, says Yusuf Shirazi, design director for TrialGraphix, a trial services firm. Jurors are used to and comfortable with receiving electronic information, and the technology is becoming more stable, he says.

Visuals can offer sparkle. With information bombarding jurors from two conflicting stories involved in the case, counsel must constantly vie for their attention. If you don't present an interactive presentation, in Shirazi's view, "You're not going to have a lot of momentum, and they'll tune out."

Two- and three-dimensional animation can be used for many types of cases, top among them car accidents, patents and construction defect cases, he informs. Animation can simplify complex ideas and technical data can be held side by side for comparison. An object like a motor, for instance, can be modeled from all angles.

How It Works

Prior to the trial, all the components are modeled individually, built from the ground up using x, y and z planes, explains Shirazi. Then, as the trial proceeds, all components can be rendered out from different aspects, and counsel can orbit and zoom around the entire object.

Animation can also be used to the court's advantage when the physical evidence can't be hauled into the courtroom—in the case of an oil rig, for example. Beside the size, moreover, a physical model doesn't do a complex subject justice, he continues. "It just doesn't have the detail you'd like to have." In contrast, three-dimensional computer modeling "helps convey the complexity of subject."

The Cost/Time Factor

While animation keeps jurors focused, one of the biggest hurdles is the cost and time to produce it, says Brad Kolacinski, business development director, Scene Systems, Inc. Animation has been used in court as far back as 15 years ago, but it is mostly reserved for huge, high-profile suits, he says. It just wasn't feasible or cost effective for an average personal injury case, he says, though he would like to see it available for even routine slip-and-fall cases.

In the past few years, the Cambridge, England, based company has made gains in 3-D animation software that allow changes to be made more quickly. Its Liveframe software is different, he says, "because it has a real time rendering engine." Thus, if the case strategy changes during the trial, the animation can be quickly revamped, something that could not be done in the past with more unforgiving storyboards.

Many courts, in fact, have been using production broadcast quality systems like those used in film production, Kolacinski explains. This is "time consuming and expensive. This [new] engine will deliver high quality images but doesn't require the tedium."

In an accident case, for example, if one part of a vehicle has to change because of new evidence, the path of the vehicle can be modified on the fly at the law office. The imaging is very flexible in other ways too.

“Say I want to get a close up on the tire,” Kolacinski proposes. A virtual camera can be placed anywhere in the scene, zoom in on the tire, and even orbit it to show the inside of the tire or the lug nuts.

Because changes can be made on the fly, and designers don’t have to go back to the beginning of the storyboard and start over, production is quicker and prices lower. Rather than taking two or three months to complete an animation, it can be done in two or three days, according to Kolacinski. And, whereas in the past, entry level animation had a price tag of about \$7,500, Scene Systems can offer starting prices below \$1,000, he reports.

Standard Tools

While animation is one of the newest whiz-bang technologies in the courtroom, other not-so-glitzy but effective tools also exist. One is the digital recorder, says Kevin Sandler, CEO, Exhibit One, which specializes in engineering, integrating and supporting presentations and telepresence technology. Courts are realizing the benefit of these devices because their return on investment is relatively easy to portray (i.e., fewer court reporters needed), and they can “justify going to the well,” he says.

Another type of device that is becoming more widespread is evidence display equipment. Though justification of its cost and ROI is more nebulous than are recorders, it also is extremely important to case throughput, Sandler stresses. For example, while it might take “five or six minutes to pass around a weapon in an evidence bag, in the digital world you bring up on monitor – and it takes seconds.” Display equipment potentially speeds up court proceedings, and thus reduces case backlog

There’s a trend for document cameras to deliver full video, and an offering that arrived in August has come out at a lower price point. A new document camera from Elmo USA called The Teacher’s Tool operates at 30 frames per second (rather than 10fps or 20fps) and is ideal for schools and courts, according to Bob Crellin, western regional sales manager. It doesn’t have the shadowy motion delay the previous document presentation equipment had in the past, and it is available for a list price of \$845.

This digital camera is better compatible with today’s higher resolution digital displays, and the icons on the operation buttons make it easy for even those unfamiliar with it to use. For attorneys that do contract work, document cameras are useful for comparing items on documents, says Crellin. “They can zoom in tightly and compare if signatures are identical or not.”

Come a Long Way

As more and more embrace the swiftly changing digital world, courts are getting on board too. And animation is one of the ways leading the charge. Of late, the technology has been streamlined and can be presented in standard movie files. “It was pretty clunky in the old days,” says TrialGraphix’s Shirazi, but today animation for courts is offered in quality that is comparable to “a cartoon on TV or a reenactment on the Discovery Channel.”

Of course, animation is only as good as data input into it, and it relies heavily on expert witnesses, police reports and any other available data, points out Kolacinski. But if used correctly, it can convert dry and boring testimony into a clear and compelling statement. It can “sum it up in 45 seconds and crystallize it in jurors minds.”

Court Technology: Reluctance or Acceptance?

When Brian Digiiovanna, president of the Court Reporters Union in New York City, did some digging about a decade ago on the use of technology employed by the New York State Supreme Court, he found the equipment used for courtroom presentations was easy to use. He explains that jumping in is really quite simple: all it requires is document cameras and computers.

He says that any reluctance he found in using presentation technology was due to attorneys that believed jurors are not comfortable with hi-tech electronics. Yet he recalls a trial several years ago where counsel on one side used presentation technology while the other side didn’t.

Before the trial was over, the other side had switched over. “Attorneys think jurors won’t like it, but the fact is, they do.”

A permanent installation in a courtroom works well, he says. Judges tend to be more comfortable with it, and attorneys can forego rentals-which cost time and money. And if a visiting attorney is stumped by the latest digital gadgets, they should ask for a brief training session prior to the trial, a request which is usually accommodated, he says.

Over the past five to 10 years, the basic way of showing evidence hasn't changed too much, he says. The major change is the switch to digital technology, he notes. For example, DVDs have replaced videos, and computers have supplanted document cameras, to an extent.

Usually the attorneys hire a company to prepare the entire presentation, he says. "They scan all the documents – it's gotten cheaper and is really not a big deal anymore."

Gauging from interest he got when he presented a new evidence presentation course by the National Court Reporters Association, Digiovanna feels the technology will only grow in courts. Over 30 attendees participated in the intensive course, which will be repeated at the organization's next meeting in Miami next February.

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