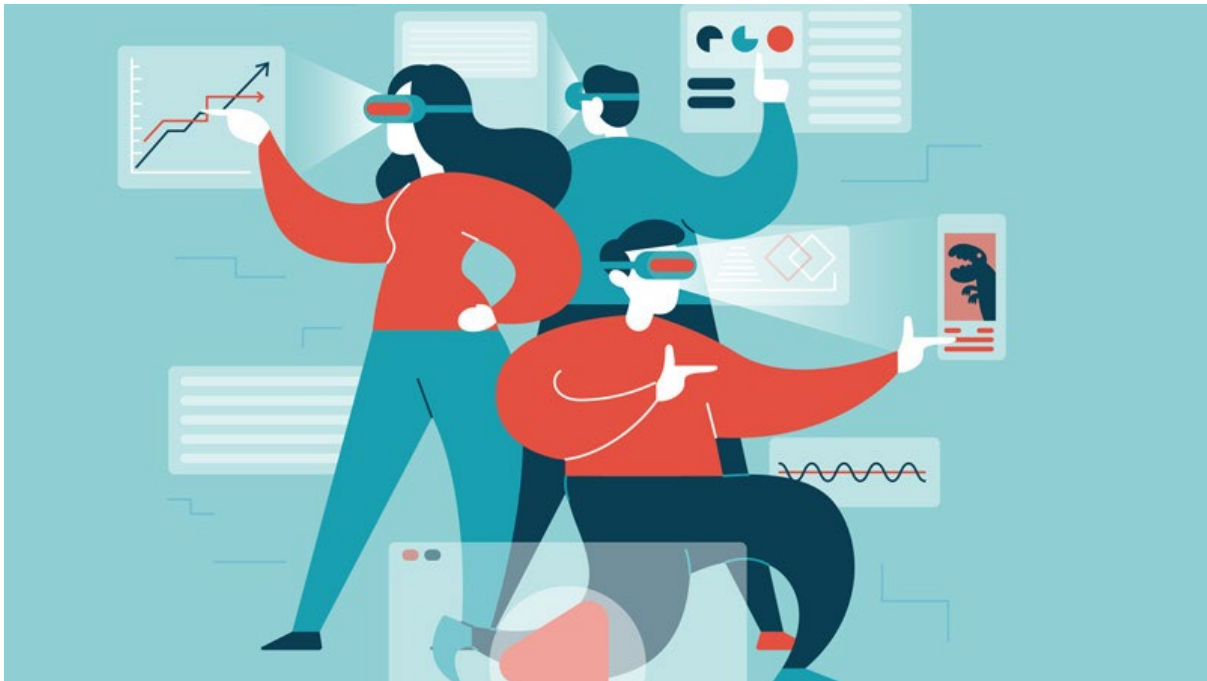


Immersive technology for tomorrow's lawyers



Maturing AR and VR presents a significant opportunity for firms and higher education institutions to ensure tomorrow's workforce has the skills needed to take the sector forward, argues Alasdair Swenson

The developments in legal technology are often debated in the context of a rise in start-up companies capitalising on the increasing adoption of artificial intelligence (AI) and atomisation of customer services.

Earlier this year, Forbes magazine reported a 713 per cent growth in legal tech start-ups during 2018 – setting a new record for investment in the industry.

This increased focus on legal technology presents a significant opportunity for law firms and higher education institutions to embrace the future; and ensure the workforce of tomorrow has the skills they need to take the sector forward.

Augmented and virtual reality is only now maturing into a technology offering real innovation and benefits to users. Until now, this has typically been used as a gimmick, primarily as a way for organisations to associate with technological innovation. This hype stage has passed.

Creative and cultural industries, including design, art, heritage, tourism, games and music, are already starting to take advantage of improved mobile devices and mass-market innovations such as the HoloLens to implement augmented reality (AR); and as the technology develops, there is a shift away from simple information overlay towards generating experiences.

The legal sector has traditionally been slower than other industries to embrace the potential for innovation that digital technologies offer.

It is understandable to see why law firms and educators would be late adopters of new technologies given the high concerns and demands of security, privacy and accessibility.

This is emphasised further when you consider the ethical demands placed on any new systems or processes, which must not adversely affect the outcome of any case or legal process.

Evidence

However, there are now signs of a shift towards a greater interest and willingness to explore the potential that technology may offer the legal sector; and the range of opportunities that this can bring to education and practice.

Examples of a shift towards technology and its potential within the sector can be seen in the success of Manchester-based

company. Evidential, which offers a variety of expert legal services including Electronic Presentation of Evidence (EPE).

EPE can be as simple as recreating images to represent a crime scene for use in court or in the press.

More recently, Evidential has been successfully exploring the use of virtual and mixed reality (VR and MR) technology which offers the wearer of a headset the ability to view and navigate an immersive 3D simulation of an environment.

One example posed by Evidential for using VR in the courtroom is that a witness may demonstrate and recollect their movements within a VR crime scene while providing evidence.

In certain cases, immersive 3D may offer a valid replacement for static image, film or animation-based reconstructions that offer only a fixed perspective and may not pre-empt or address the queries raised in court.

An accurate 3D reconstruction of a crime scene navigated in real time by a witness viewed by the courtroom would offer a greater understanding and accuracy. It is often said: 'a picture speaks a thousand words', however, real-time immersive 3D inevitably offers a much greater level of information.

Immersive environments increase efficiency in industry by allowing more thorough and accurate interrogation of an object or environment in real-time. In a legal context, this would hopefully reduce the need for further clarification, recalling witnesses and requesting the re-creation of further evidence, therefore reducing time and cost.

At Manchester Metropolitan University, as with all educational institutions, we know that our new students joining the university each year come with an increased understanding of technology and are using technology more in their personal lives.

Technology is also playing an increasing role within their primary and secondary education. It is therefore essential that we understand and embrace the way students are engaging with and experiencing the world through technology.

We have a real opportunity to innovate using technology within higher education ahead of the legal industry – which is considering the opportunities, but facing greater barriers to trialling new technologies.

At Manchester Metropolitan's Creative AR & VR Hub, which is led by Dr Timothy Jung, we have the unique opportunity, working closely with industry, to research the adoption and feasibility of cutting-edge technologies.

Technology changes rapidly and we are continuing to explore new AR and VR opportunities across industry, business and academia.

Discussions between our creative hub and academics within our law school have raised several potential scenarios where immersive technology may replace or enhance some of the learning resources currently used by students.

One example currently being explored is that of a virtual reality courtroom in which students are able to interact with legal cases.

They will be able to engage with a case naturally using voice and physical interactions and then receive feedback on their performance be it automated, peer or self-review.

We hope to see a return in students' confidence by allowing them exposure to legal scenarios within environments representative of workplace or assessment scenarios where, in reality, this opportunity is unfeasible.

During our discussions and by looking at recent student feedback, we identified some common challenges faced by law students; in particular, vocational students who often reported lower self confidence in the entry level skills required of them than their peers attending with academic qualifications.

It has been observed that, particularly with first year undergraduate students, the court room (albeit simulated) offers a challenging and intimidating environment. If we can improve students' self-confidence we'd expect to see improvements in their performance during assessment.

Combining these challenges with the known potential of immersive technology will allow us to offer learning aids that grant students exposure to legal scenarios through experiential and gamified learning in a way that has not been possible before.

We are currently developing virtual immersive training spaces for our students and included some of our recent law graduates in discussion about their learning experience and the potential for VR in education.

Having given them early access to a demonstration virtual environment they were encouragingly enthusiastic and excited about the potential that this technology may offer.

We hope forthcoming trials will further demonstrate the potential for students to improve self-efficacy, soft skills and overall confidence that are all increasingly in demand from employees in industry.

Due to the current, early stage of development we are working on a technical platform before we intend opening up to outside collaboration where, initially, the value from industry input will be around ensuring the interactive content is relevant for our students' training.

Most importantly, when looking at the potential use of legal technology in education, it is vital we work together with our students and our industry partners to ensure that the technology develops the education experience and meets the need of the modern-day law sector.