

# Technologies That Hold The Key To The Future Of eLearning

*Insight into the technologies that will play a key role in the transformation of eLearning in the near future.*

## Trends That Will Actually Form The Future Of eLearning

The 2018 Training Industry Report shows some interesting findings: “Total 2018 U.S. training expenditures—including payroll and spending on external products and services—declined 6.4% to \$87.6 billion. Spending on outside products and services rose from \$7.5 billion to \$11 billion, while other training expenditures (i.e., travel, facilities, equipment) decreased to \$29.6 billion from \$44.5 billion. Meanwhile, training payroll increased nearly 13% to \$47 billion” [1]. Though there’s a minor decrease in the funds spent on training, the value is still quite substantial, and companies will continue to invest in training their employees to help them work with greater efficiency.

eLearning solutions continue to remain the first choice of organizations to train their employees as they offer greater flexibility and are easier to deploy. In this article, we examine some of the key technologies that will be instrumental in deciding the future of eLearning.

## Transitioning To Mobile Learning Apps

The trend started with learning apps designed for children that would help them learn languages and pick up Math skills with ease. As people observed the high success rates and benefits of these mobile apps, it was all but inevitable that companies decided to tap into the world of apps to cater to adult learning and skill development.

Mobile apps are less expensive to design and can maintain a full-scale learning platform or website. With agile business philosophy being the order of the day and the ease with which mobile apps can be built, probably in the next few years, we will witness the trend of ‘mobile-only’ learning apps for the modern workforce.

## When The Real And Virtual Worlds Meet

Augmented and Virtual Reality solutions are becoming less expensive and more accessible to the general public. In 2022, [the Augmented and Virtual Reality market](#) is expected to reach a market size of 209.2 billion U.S. dollars. Affordable VR headsets and VR apps are making the VR experience a household term now. Today, we have access to websites like AppyPie that allow people to build their own AR and VR mobile apps. All major technology players like Google, Microsoft, Apple, and Facebook have invested significant sums of money in AR and VR technology. Even a show like 'Bandersnatch' on Netflix seeks to offer its viewers an immersive entertainment experience.

The opportunities for integrating AR and VR in eLearning are endless. From creating designs that transport the learner to the insides of automobiles and locomotives to helping medical students understand the intricacies of the human body, AR and VR have a massive role to play in making eLearning more interesting and engaging for modern learners. These solutions offer an immersive learning experience and help learners get as realistic learning experiences as possible.

A number of organizations are also integrating AR and VR-based solutions to welcome and onboard new employees to their organization.

## Learning As A Service

Have you observed how the entertainment industry has evolved in the past five years with the growth of streaming services? These services, like Netflix, Hulu, and Amazon Prime Video, allow you to subscribe for a long-term package that grants you access to movies and TV shows at the click of a button.

Corporate eLearning is now in a similar state, on one side we have big-name course-providers who have a massive catalog of off-the-shelf courses that are deployed easily. On the other side, we have providers who offer a white-labeled solution that puts the client's branding on the existing ready-to-use content. Amidst these two players, the customized content creators exist to offer a personalized learning experience.

As the focus shifts towards the interests of the learner rather than an organization thrusting generic courses upon the learner, expect a Netflix-like scenario for eLearning wherein the learner is empowered in choosing a course of their liking. This is already in force with providers like Udemy, Coursera, and EdX offering numerous courses across topics. We are looking at a similar shift in the corporate eLearning space as well. The growth of learning as a service has several ramifications on the eLearning industry. People will prefer to buy exactly what they need instead of a massive package of courses. Subscription-based learning will help organizations cut down on unnecessary training expenses and focus on their core business. EdCast has acquired Leapest which is a learning marketplace content and technology provider. This again is a sign of how organizations want to have a balance of legacy learning content, off-the-shelf courses, and customized learning to meet the growing demands of providers. This trend will continue as more learning technology firms seek to acquire content creators to become integrated LaaS providers. Companies like IBM have taken this one step forward and now offer their expertise in [Deep Learning and AI as a service](#).

### Personalized Learning And Recommendation Engines

Personalized learning has been around for a while and will continue to remain strong. The need for customized and personalized learning experiences that cater to specific learning needs and skill-sets of the learner are instrumental in determining the success of eLearning programs. Generic learning programs can only cater to certain needs like safety programs, or business communication and office etiquette. When training is required for highly skilled tasks like running a turbine or repairing an aircraft, it is recommended to create and deploy a personalized learning solution.

Personalization of learning is also dependent on the availability of high-quality data. Data is the crux on which recommendation engines powered by machine learning are built. The more users you have on a platform, the greater the variety and depth of the data that you generate from it. Once you get more information about user-behavior and learner interests you can add this into the recommendation engine that can then generate information to help you recommend courses to your users. The future of eLearning will be heavily dependent on data and algorithms that power recommendation engines.

## Learning Beyond The LMS And The Role Of xAPI

Traditional learning is completed within the LMS. But today the whole concept of learning at the workplace has changed. We are not limited to Instructor-Led Training or blended learning programs. Learners access learning content from social media websites, video platforms, community forums, and leader-boards and all this happens out of the LMS. The LMS can only capture details of learner-activities within the LMS. xAPI is an eLearning specification that makes it possible to collect data about the wide range of experiences a person has within online and offline training activities.

In an increasingly data-driven world, this is of great significance. One of the big advantages of using xAPI is that it does not require 24/7 internet connectivity. A learner can complete the learning activity offline, the activity statement will be recorded and stored to the Learning Record Store (LRS) when the internet connectivity resumes. In developing countries, where full-scale data connectivity is still a pipe-dream; this is a big, big deal. As eLearning transitions towards learning experience platforms and mobile learning apps, xAPI and offline learning solutions will have a major role to play in determining the future of eLearning.