

Current Mobile Limitations

	Issue	Status	Impact Area	More Info
Context	<p>Cell/Wi-Fi Access Continuous access to the internet and other networks are needed for recommendation engines to function. Mobile devices need this access when underground, in the air and in other remote areas.</p>	<p>Many technologies are being implemented to address these gaps. Issues with underground and air connections should be addressed in 2-3 years; remote coverage still remains a problem but should start being addressed in 5- 10 years</p>	<p>This is needed in order to gather contextual data about the user's environment. This data can be used with push/pull techniques to create custom content based on a user's immediate and future needs.</p>	<p>Underground Air Google Balloons</p>
	<p>Non-standard Technology Many existing solutions require special apps or only work on certain devices. A common set of protocols and requirements is needed across mobile devices to provide better communication across devices.</p>	<p>This will always be an issue as these devices will continue to evolve; however, standardization will come with technologies that hold the most potential. NFC is an example of this—it isn't a standard on all mobile devices now but will be in 2- 3 years.</p> <p>Other devices are becoming connected and are starting to communicate; however, these devices are isolated on their own systems. The Internet of Things and its impact with mobile is 5 – 10 years out.</p>	<p>This will impact how users interact with their mobile devices and how these devices interact with the environments around them.</p>	<p>Always on Gathering Data What's holding up the Internet of things</p>
	<p>Intuitive Technology Existing technology isn't easy to use, intuitive or handy. Part of this is related to the learning curve with these devices, but a bigger issue is the inconvenience of use—<i>you have to pull out your phone/tablet, open the right app and then manually interact with the device.</i></p>	<p>Wearable devices will make these technologies easier to use and more intuitive. Large-scale use of intuitive and useful wearable devices is 2– 3 years out.</p>	<p>Augmented Reality (AR) and other technologies will be used to enhance performance. These enhancements will be seamless and intuitive.</p>	<p>Augmented Reality? Google Glass Pebble Watch</p>
	<p>Missing Connections Data sets are isolated and not connected. This profile information is critical to providing individualized content in the form of recommendations and assignments.</p>	<p>Open APIs are starting to connect data sets and new technologies are emerging to further analyze and act on them. In addition, users are becoming more comfortable with sharing data. As more objects and systems start communicating and sharing information this advantage will outweigh the privacy concerns of many users. Limited progress will be made in this area in the near future (1 -2 years), but we should see wide scale use in 5 -10 years.</p>	<p>Detailed profiles will be created that identify our immediate and future needs. These profiles will be connected to Push/Pull mechanisms to control training initiatives.</p>	<p>Future of mobile Adaptive Learning</p>

Other	<p>Security Concerns Mobile devices are replacing desktop and laptop use. Hackers realize this and are targeting these devices with malware and other methods.</p>	<p>Security procedures and protocols are being established for these devices. In addition, users are becoming more aware of the threat and taking measures to counter this risk. This security threat will remain an ongoing risk for mobile devices.</p>		<p>Protecting Your Device</p>
	<p>Tracking Performance Corporate learning relies on SCORM and AICC content to track training. Unfortunately these standards do not work well with mobile technologies. New methods of tracking mobile as well as informal content needs to be established for corporate use.</p>	<p>Experience API and Mozilla's Open Badges allow for the tracking of mobile device and informal content. In addition these technologies should be able to communicate with standard Learning Management Systems. This should become a wide-scale reality in 2-3 years.</p>	<p>Regardless of the platform, learning administrators should be able to track both formal and informal learning activities.</p>	<p>Experience API Mozilla's Open Badges</p>

