CourseSmart is a leading Educational Services Platform and the only provider of digital course materials able to combine curriculum, content and delivery into a single solution. Founded in 2007, we provide services to four business segments: online direct retail for students; indirect distribution of course materials to students through bookstores; online faculty textbook evaluation services; and institutional solutions for faculty and students that are integrated within campus technology ecosystems. CourseSmart improves the educational experience by offering all users, including those with print–related disabilities, any–time, anywhere access to the course content they need.

CourseSmart believes that cloud-based media is the direction for future content consumption. Thus, CourseSmart was early-to-market with a platform embracing this idea. While most students will use eTextbook content while connected to the internet, offline access continues to be an important practical and psychological barrier to mainstream adoption. Students and instructors often rely on a local copy of the eTextbook for back-up (in case the network is down) or to study while commuting. In 2011 CourseSmart introduced a browser based offline reading experience leveraging the capabilities of HTML5 app cache. This approach has advantages. For example, the need to download or install a client application to read a CourseSmart eTextbook when not connected to the internet is eliminated. However leading browsers like Chrome, Safari & Firefox limit the application cache to 500 Mb. As a result, this limits the number of books that a user can save locally. Other HTML5 based solutions such as Indexed DB and File System API do provide the ability to store significant amounts of data on the client-side, but using Indexed DB introduces performance related tradeoffs for a JavaScript heavy web application like ours and File System API works only with Chrome Run time. In order to provide a unified reading system in both online and offline modes, we need to overcome the barrier of limited local storage capacity.