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# The Evolving eTextbook Landscape Strategies, Platform, Innovation

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## Introduction: The eTextbook Marketplace

Higher education's etextbook market is evolving from a relatively simple market space of players converting print-based text books online to a more complex and focused environment facilitating production with a spectrum of multimedia, e-press and branding possibilities. An older still dominant textbook model appropriates print textbooks, turns them into digital formats and repackages these for online distribution. Recent models involve the redefinition of the textbook itself along with reconfiguration of supply chains and infrastructures. New pathways to production also enable an institution's own intellectual capital (faculty) to produce or license published articles and other resourced media and documents into new interactive multimodal media texts.





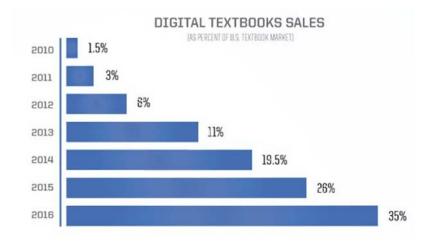
### Questions

What is the best market partner for an institution to take with regards to etextbook production and distribution? What are the general characteristics and forces for different emerging etextbook models and how can market players be classified in this evolving taxonomy? What is the most likely etextbook production model to dominate and what are the competitive characteristics of this new market? This review examines seven current industry players and glances at emergent competing models: AcademicPub, CourseSmart, LEAP Learning Solutions, Aptara, Tizra, Vital Source and new Apple market entrant, iTextbook. While this is by no means all of the players, this review does give the spectrum of emergent possibility. What are the business models and which of these epublishing infrastructures should institutions be considering in terms of innovation, future profit and educational possibility?

### **Etextbooks and the Education Marketplace**



Currently, Education is a seven trillion dollar global market.<sup>1</sup> This is five hundred and seventy times the size of the global online advertising market or more than the current GDP of Italy, France and the UK combined. For the US, digital textbook sales are projected to increase from currently 3% of the total textbook market to 18% by 2014 and 35% by 2016.<sup>2</sup>



Source Meeker: The State of Digital Education<sup>3</sup>

Seven million students are presently enrolled in online courses with the growth rate of online learning enrollment increasing fourteen times faster than that of traditional higher education. Ninety-six percent of universities offer at least one online course and the US textbook market is currently a 7.5 billion dollar industry with 5.5 billion of this currently sold as new print textbooks.<sup>4</sup> Digital textbooks are on average 53% cheaper than print textbooks. The innovation with digital textbooks also increases with new possibilities ranging from interactive content to a spectrum of curricular media type combinations (audio, video, simulations, datasets) to inline quizzes, interactive games and socially networked global study groups embedded in the etextbook itself.

A relatively small number of eBook publishers (18%) generate more than 10% of their revenue from eBook sales.<sup>5</sup> The market is not close to saturated with plenty of room for growth. The largest source of ebook sales is not surprisingly Amazon with 38% of all sales. The current preferred reader for ebooks is perhaps a little more surprisingly, the newer iPad (25%) with Kindle and the laptop PC taking up respectively eighteen percent of the market.<sup>6</sup> The laptop/desktop PC combination, comprises 36% of the reading market.<sup>7</sup> In terms of overall material sales, the total global print textbook market is currently valued at 8.2 billion of which approximately 9 billion is projected by 2014. Of this textbook market, the conservative estimate by 2014 is for a 1.1 billion dollar total desired conversion into e-resources.<sup>8</sup> At the least, a paradigm shift of revenue streams is occurring. New market participants and entry opportunities emerge, particularly for innovative digital content.

### Apple's iTextbook Initiative 2012



Apple itextbook Initiative: http://www.apple.com/education/ibooks-textbooks/

Apple's iTextbook initiative is the newest entrant into this market but also the one with potential for current market disruption. The wider business strategy comprises a suite of integrated software (iTextbook, iTunesU, iAuthor, iBookstore)<sup>9</sup>, hardware (the IPad) and infrastructure partnerships with the three major textbook publishers (Pearson, Cengage and McGraw Hill) who comprise 90% of the global textbook market.<sup>10</sup> Apple's integrated model enters a little late into the market but is a major attempt to reconfigure and dominate.

Officially released as an initiative on January 12, 2012, during its first 3 days of operation, Apple's iTextbook initiative has initially achieved over 350,000 etextbooks downloaded from the company's official iTextbook distribution channel, iBookstore.<sup>11</sup> Similar to Apple's simple but radical iTunes reconfiguration of the music industries

distribution methodology, iBookstore and iTunesU is an attempt to reconfigure both textbook production and distribution. Whether the textbook will be disaggregated into chapters for cheaper download similar to Apple's sophisticated disaggregation of the previous LP twelve track record model remains to be seen.

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ItunesU: http://www.apple.com/education/itunes-u/

Currently, Apple's business strategy places a new low cost on college textbooks with a market cap of \$14.99/book. This is significant and a potential game changer. The current average cost of a print textbook is 110.00 with an eBook average of \$55.00/book. The national average for full time students at four year colleges for textbooks in a school year is \$1,168.00.<sup>12</sup> Apple's model alone has the potential to shift both print and prevailing electronic paradigms with an 85% reduction in cost.

From other perspectives, Apple's entry becomes more challenging. From a publisher or university institutional perspective that wishes to retain revenue rights. Apple's author licensing strictures involve a 30% cut out from any revenue derived from any book published with iAuthor or through the iBookstore and iTunes U.<sup>13</sup> Ed Bott points out that Apple's reconfiguring of the 'ePub' open source standard (the current open iTextbook authoring source) has echoes with Microsoft's earlier 'embrace, extend and extinguish market strategy' of entering a product category, embracing an open standard (i.e. ePub3, HTML5)<sup>14</sup> and then remixing the standard towards proprietary so that it can only be used on the company approved platforms (iTunes U, ibookstore) to disadvantage competitors.<sup>15</sup> Michael Porter's forces for industry rivalry come into high relief here<sup>16</sup> including preferred alliances with dominant supplier chains (Cengage, Pearson and McGraw Hill), price competition through lower price models and eliminating new entrants through sophisticated technological barriers to distribution, innovation and production. Current significant barriers to Apple's entrance though, include a higher cost for an iPad (starting at 499.00) and late entry into the market. Speculation currently verges on Apple eventually introducing a new low cost computer/reader iPad specifically for the eTextbook market and relaxing strictures on licensing agreements.<sup>17</sup> So far, it looks like Apple's newest March 16 2012 ipad will have a suite of new features with the same \$499.00 price tag with an expected model reduction of \$399.00 going to a previous iPad II.<sup>18</sup>

Of the eTextbook strategies to be discussed, Apple's is perhaps the most elegantly conceived and the most markedly sophisticated with a fascinating interconnected four-legged technological stool which includes the iPad, iBooks (the new

reading tool and bookstore), 'iTunes author' (a publishing tool to simplify creation of interactive textbooks) and iTunesU for the iPad (an infrastructure to integrate course and institutional curricula).<sup>19</sup> While a little late in the game, Apple's strategy combines device, end user simplicity with sophisticated integrated leveraging of previous established software and hardware infrastructures.



Apple ibooks Author: <u>http://www.apple.com/ibooks-author/</u>

### The Rest of the Best

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Academic Pub: http://academicpub.sharedbook.com/academicpub/

### **Course Packs Online AcademicPub**

AcademicPub is also a relatively new eTextbook market entrant, begun in April of 2011.<sup>20</sup> The business model currently aggregates disparate eTextbook article and chapter resources from 75 larger academic publishers of traditional textbooks and journals ranging from Cambridge University Press to MIT's Business publishers.<sup>21</sup> AcademicPub does not have arrangements with three largest publishers noted above and offers a much more modest and perhaps earlier eTextbook model essentially taking the well-known print compiled 'course pack' and offering real time copyright permission and digitization services. The model is less spectacular next to Apple's and fits a previous model where 'article' aggregate and textbook chapters are especially a good fit for upper level undergraduate and Master's level courses.

Pragmatically, AcademicPub provides the service of facilitating online quick digital compilation, composition, copyright clearance, publication and distribution of previous 'print' course packs.<sup>22</sup> Copyright legal issues with regards to compiling curricular texts are simplified for end producers as is the aggregation of open source or a university's

own faculty produced chapters/articles into PDF or curricular online or in print course packs. AcademicPub's model is also not strictly digitally-oriented but allows compilations to be ported to print and is e-device agnostic so that texts created can be read on the iPad iPhone, Android, Blackberry, Nook and Sony Reader. This is not the case with Apple which makes a wider attempt to dominate the market with both device and software infrastructures.

AcademicPub is well-suited to the present hybrid physical/online marketplace of higher education transitioning to digital curricular methodologies. Pricing for books comes with a higher price tag than Apple's with a 6.00-10.00 dollar base price and copyright clearance 20.00-40.00 dollars/text. Because there are no advance arrangements with publishers, there is a 2-10 week lag time for digital course pack production.<sup>23</sup> If students wish the option of print, this also adds \$10.00. Because of AcademicPub's lack of big three publisher's support, other weaknesses are easier to see including both lack of incorporation of interactive media and prohibitive production time by high speed internet expectations.

## CoursePack 2.0: Tizra



Tizra: http://tizra.com

Essentially, a more sophisticated version of Academic Pub, Tizra offers a wide palette of online publishing resources than AcademicPub especially with regards to institutions leveraging 'ecommerce' potentials for etextbook content management and online revenue possibilities. While AcademicPub offers a single document point of publication and sale, Tizra offers etextbook production and infrastructure possibilities to innovatively resell faculty-produced textbooks by chapter, remixed book or document collections.

Tizra also excels as an epublishing online customizable storefront infrastructure offering easily brandable, searchable and analytical capabilities for institutions interested in locally producing etextbooks. While Apple's model controls the online storefront infrastructure through the ibookstore and 30% licensing fee, Tizra's flexible storefront licenses the entire online infrastructure for eTextbook production, online distribution and sales possibilities. Columbia University Press etextbooks for example becomes its own branded site rather than say Columbia University Press publications produced through iauthor and sold through Apple's iTunes. This more open marketing, merchandizing and ecommerce capability has a level of appeal to those institutions not interested in platform lockdown or handing over 30% of future sales through a licensing

agreement but this model also comes with a cost. Unfortunately, Tizra's current basic setup costs an institution a minimum of \$ 9,500.00 plus various optional services options (i.e. branding, \$5000.00, batch eTextbook content loading, 3000.00, offsite hosting, 2500.00 annually). The difference between Apple and Tizra become giving away author's rights in perpetuity for distribution or hosting one's own platform for a hefty upfront fee.

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# Interactive Textbook Production Services: Aptara and Leap



Aptara: http://www.aptaracorp.com/

Widening online textbook publishing parameters, Aptara and Leap Learning Solutions offer another angle on etextbook production through the possibilities of multimedia and incorporation of video, image and simulations.<sup>24</sup> Rather than Apples' self-production models (Apple's iAuthor) or text centric models such as AcademicPub or Tizra, Aptara and Leap embrace an interactive textbook service production approach taking linear text-centric curricular resources and reconfiguring them through the possibilities of multimedia, video, images and simulation.

Differences between Leap and Aptara may be summarized with regards to production cost. Leap Learning Solutions provides a one stop shop to produce interactive textbooks for universities through a well-established North American publishing model. Aptara leverages an offshore human resource component of the vast Indian technologically and more economical workforce (4000 employees in India and 1000 globally).<sup>25</sup> Both models lend themselves to institutions interested in interactive multimedia etextbook production but not interested in doing the development themselves. Synergistically, Aptara does also serve as an eBook developer for publishers such as McGraw Hill and Pearson whose interactive eBooks find themselves into Apple's iBookstore through their distribution deals.<sup>26</sup> To note, the market is rapidly shifting and perhaps beginning a second phase. Since research for this article first began, Aptara has been acquired for 144 million by a UK vendor (iEnergizer) signaling perhaps the beginnings of wider vendor consolidation in the larger e-book technology Industry.<sup>27</sup>

### **Traditions Continue: CourseSmart and Vital Source**

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CourseSmart: http://www.coursesmart.com/, VitalSource: http://vitalsource.com

While calling them the old guard of etextbook market players may be a bit harsh, an examination of eBook market players would not be complete without at least a nod to CourseSmart and VitalSource. The companies remain perhaps the most market entrenched and dominant etextbook market players. Essentially both companies provide traditional online distribution paths from print, digitizing textbooks without fanfare for various readable electronic formats. VitalSource is the eTextbook arm of Ingram still the largest textbook wholesale distributor in the world.<sup>28</sup> Both models provide education industry continuity for established transitionary pathways for higher educational sources migrating from traditional print to online textbooks. To note, Vital Source is the most used e-textbook platform in higher education with over 1.6 million users, 6,000 campuses and 180 countries. Whether Apple or the above newly mentioned players have the ability to disrupt these entrenched market players remains to be seen. Where CourseSmart and VitalSource were the only game in town a few

years ago, they are now confronted with a newer and savvy bevy of etextbook market 15 choices.

# Looking To the Future: Synergy Innovation Consolidation

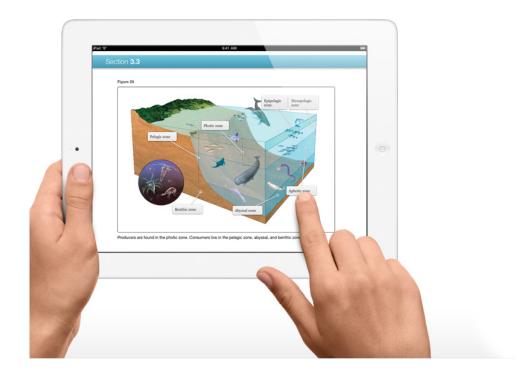




MIT OpenCourseware: http://ocw.mit.edu , NBCLearn: http://www.nbclearn.com

Perhaps before concluding it's wise to glance at emerging horizons and trajectories for the e-book landscape. Here, a number of innovative directions are in start-up phases. Worth mentioning are the openings of the mass commercial media archives (NBC Learn, NY Times)<sup>29</sup> to course development and e-textbook possibilities including major scientific journals (Scientific American, Nature) to transform proprietary content into etextbooks. eTextbook Publishers such as McGraw Hill and Cengage are also stepping up their game from multimedia etextbook production to entire online multimedia 'eCourse' packages where faculty truly become the guide on the side.<sup>30</sup>

Rapidly ascendant also are a spectrum of increasingly robust open source etextbook (Connexions, FlatworldKnowledge, MERLOT)<sup>31</sup> and emerging video etextbook (Khan Academy) possibilities.<sup>32</sup> This more complexly includes MIT with their open courseware<sup>33</sup> and badge initiatives and Stanford with their massive online open source courses (MOOCs)<sup>34</sup>. The for-profit 2012 spin-off of Stanford's MOOC initiative has also appeared recently as Know Labs and Udacity<sup>35</sup> and not to be outdone, Technology Entertainment Design group (TED) recently launched TED-ED putting together talents of academic researchers and educators with visually-oriented animators and videographers towards creating robust multimedia video-oriented curricular tools.<sup>36</sup> To say the least, many of these developments and developing synergies will alter the course of higher educational methodology in the twenty first century.



## Conclusions

The current etextbook market landscape and directions discussed herald a fascinating emergent spectrum of institutional models with regards to online innovation, production, distribution and marketing for etextbooks in the twenty first century. The industry is young, potential for growth enormous. It is early in the game. The stakes are high. Hopefully, this examination has begun to clarify etextbook market competitors through a contextualization of some of this new terrain.

This new twenty-first century etextbook market has large significance for the ways education will evolve in the twenty-first century. Surprising, paradigm changing methodologies have already appeared in the increasingly global etextbook marketplace. It will be interesting to see how the global education market and current field develops in the coming decade.

### References

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<sup>1</sup> Meeker, Kelly (2012). The state of digital education. *Open Sesame* Retrieved from <u>https://www.opensesame.com/blog/state-digital-</u>education?utm\_source=Social%2BMedia&utm\_medium=Twitter&utm\_campaign=Knewton

<sup>2</sup> Ibid.

<sup>3</sup> Ibid.

<sup>4</sup> O'Neill, Mark (September 21, 2011). The textbooks of tomorrow. Retrieved from <u>http://www.onlineeducation.net/digital-textbooks</u>

<sup>5</sup> Kowalczyk, Piotr (December 7, 2011). Ebook Publishing Stats. Retrieved from:

http://www.teleread.com/paul-biba/ebook-publishing-stats-infographic-by-piotr-kowalczyk/ <sup>6</sup> *Ibid.* 

<sup>7</sup> O'Dell, Joli (July 27, 2011). The state of the tablet and ereader market. Mashable. Retrieved from: http://mashable.com/2011/07/27/tablets-ereaders/

<sup>8</sup>Reynolds, Rob (2011). "Digital textbook sales in U.S. higher education - A five year projection. The Xplanation. Retrieved from: <u>http://blog.xplana.com/reports/digital-textbook-sales-in-u-s-higher-education-%E2%80%93-a-five-year-projection/</u>

<sup>9</sup> Apple (2012). iBooks textbooks for IPad. Apple in Education. Retrieved from: <u>http://www.apple.com/education/ibooks-textbooks/</u>

<sup>10</sup> Elmer-Dewitt, Philip (January 19 2012). Live from Apple's Education Event at the Guggenheim. *CNN Money*. Retrieved from: <u>http://tech.fortune.cnn.com/2012/01/19/live-from-apples-education-event/</u>

<sup>11</sup> Elmer-DeWitt, Philip (2012). Apple's iTextbooks: 3 days, 8 titles, 350,000-plus downloads. *CNN Money*. Retrieved from <u>http://tech.fortune.cnn.com/2012/01/23/apples-itextbooks-3-days-8-titles-350000-plus-downloads/</u>

<sup>12</sup> College Board (2012). College expenses to consider. Retrieved from:

http://www.collegeboard.com/student/pay/add-it-up/482.html

<sup>13</sup> Bott, Ed (January 19, 2012). "Apple's mind-boggling greedy and evil license agreement. The Ed Bott Report. Retrieved from: <u>http://www.zdnet.com/blog/bott/apples-mind-bogglingly-greedy-and-evil-</u> <u>license-agreement/4360</u>

<sup>14</sup> For ePub3 see <u>http://idpf.org/epub/30</u> and HTML5 <u>http://www.apple.com/html5/</u> and <u>http://dev.w3.org/html5/spec/Overview.html</u>.

<sup>15</sup>--- (January, 22, 2012). How Apple is sabotaging an open standard for digital books. Retrieved from: <u>http://www.zdnet.com/blog/bott/how-apple-is-sabotaging-an-open-standard-for-digital-books/4378?tag=content;siu-container</u>

<sup>16</sup> Porter, M.E. (2008) The Five Competitive Forces That Shape Strategy, Harvard Business Review, January 2008, p. 86-104.

<sup>17</sup>Ulanoff, Lance (January 19, 2012). This is how apple changes education, forever. *Mashable*. Retrieved from: <u>http://mashable.com/2012/01/19/this-is-how-apple-changes-education-forever/</u>

<sup>18</sup>Durante, Thomas and Waugh, Rob (March 8, 2012). An iPad by any other name. *Daily Mail online: Science and Tech*. Retrieved from:

http://www.dailymail.co.uk/sciencetech/article-2112199/New-iPad-launch-Techies-decry-new-devices-lack-thereof--faces-ban-China.html?ito=feeds-newsxml. See also Apple's ipad

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<u>http://www.apple.com/ipad/</u> and itextbook website for the most current information: <u>http://www.apple.com/education/ibooks-textbooks/</u>

<sup>20</sup> Campbell, Alex (October 9, 2011). New digital tools let professors tailor their own textbooks for under
\$20. Chronicle of Higher Education. Retrieved from: <a href="http://chronicle.com/article/New-Digital-Tools-let/129309/?sid=cc&utm\_source=cc&utm\_medium=en">http://chronicle.com/article/New-Digital-Tools-let/129309/?sid=cc&utm\_source=cc&utm\_medium=en</a>

<sup>21</sup> Ibid.

<sup>22</sup> AcademicPub (2012). Company website. Retrieved from:

http://academicpub.sharedbook.com/academicpub/

<sup>23</sup> Ibid.

<sup>24</sup> Aptara (2012).Company website Retrieved from. http://www.aptaracorp.com and LEAP Higher Education (2012). Company website. Retrieved from <u>http://www.leaphighered.com/about-us/</u>

<sup>25</sup> Ibid.

<sup>26</sup> Ibid.

<sup>27</sup> Greenfield, Jeremy (February 13, 2012). E-book vendor Aptara acquired by iEnergizer for \$144 Million. *Digital Book World*. Retrieved from: <u>http://www.digitalbookworld.com/2012/e-book-vendor-aptara-</u> acquired-by-ienergizer-for-144-million/

<sup>28</sup> Vital Source Company website (2012). Retrieved from:

http://www.ingramcontent.com/MRKNG/2011/52373/52373Vitalsource.html

<sup>29</sup> See <u>http://learning.blogs.nytimes.com/</u> and <u>http://www.nbclearn.com/portal/site/learn</u>

<sup>30</sup> For Cengage See <u>http://www.cengage.com/us/</u> and McGraw Hill <u>http://connect.mcgraw-</u>

hill.com/connectweb/branding/en\_US/default/html/instructor/index.html

<sup>31</sup> For Connexions see <u>http://cnx.org/</u>, MERLOT: <u>http://www.merlot.org/merlot/index.htm</u> and Flatworld Knowledge: <u>http://www.flatworldknowledge.com/</u>

<sup>32</sup> See Khan Academy. http://www.khanacademy.org/

<sup>33</sup> For MIT OpenCourseware see: <u>http://ocw.mit.edu/index.htm</u>.

<sup>34</sup> Markoff, John (August 15, 2011). Virtual and artificial but 58,000 want course. *NY Times*. Retrieved from: <u>http://www.nytimes.com/2011/08/16/science/16stanford.html</u>

<sup>35</sup> Kolowich, Steve (January 24, 2012). Massive courses, sans Stanford. Inside Higher Ed. Retrieved from: <u>http://www.insidehighered.com/news/2012/01/24/stanford-open-course-instructors-spin-profit-company</u>

<sup>36</sup> TED-Ed. See <u>http://education.ted.com/</u> and Young, Jeffrey. (March 12, 2012) Ted, Known for Idea Talks, Releases Educational Videos. Chronicle of Higher Education. Retrieved from:

http://chronicle.com/blogs/wiredcampus/ted-known-for-idea-talks-releases-educationalvideos/35745?sid=wc&utm\_source=wc&utm\_medium=en\_

<sup>&</sup>lt;sup>19</sup> Elmer-Dewitt, ref. 10 above.