

E-BOOKS: REPLACING TRADITIONAL TEXTBOOKS

Presented to the Faculty of the Graphic Communication Department

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Requirements for the Degree
Bachelor of Science

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CHAPTER 1

The institution of higher learning faced some big decisions and major changes as budgets were tight and the digital age continued to engulf the graphic communication industry at the beginning of the 21st Century. Societal changes created by new technologies were affecting how people sought information. Print on paper was no longer the predominant way of communicating. New opportunities created by the Internet churned up new innovations and products related to digital communication. One technology that had the potential to change the learning environment for students everywhere was the electronic book, or e-books. In that technological age, students were exposed to new innovations and digital alternatives each and every day.

The Internet had become the dominant media for accessing information, and with print publications becoming antiquated in the mind of students; why not implement electronic textbooks to match the fast paced lifestyle of students? As textbook publishing companies continued to develop digital content, device companies began marketing reading devices that could be used to supplement, or altogether replace textbooks for use in education. What were the advantages of using electronic textbooks? Besides the obvious relief of not having to carry heavy and awkward hardback texts, the use of digital textbooks had the potential to allow for significant cost savings and could potentially elevate learning among students.

E-books were growing in popularity due to the decrease in price and the increase in downloadable content. The Amazon Kindle, priced at \$259, was just one of the several devices available at the time that could provide its reader with information at a moment's notice. The convenient device read like paper and was equipped with features that avid readers would expect

if reading a tangible book. If colleges were to adopt e-books as a means to transfer knowledge to students, education would be forever changed. Instead of buying multiple highly priced textbooks each term, a student could purchase a single device and would be able to upload the necessary course content for a fraction of the cost. Just as cell phones and iPods had assumed such a prominent role in a college student's life, so too might e-books if students began to adopt the new technology. This study hoped to show that college students would prefer electronic textbooks as an alternative to traditional textbooks.

The purpose of this study was to determine the benefits of electronic textbooks for students, teachers, and publishers alike, and to determine if the use or desire for electronic books among students had increased. Students seemed eager to test new technologies, especially electronic devices. However, engaging the college demographic in non-pleasure reading was always difficult. Electronic textbooks and reading devices had to improve students learning experience in order to be effective. E-books had to also be attractive to publishers so that content could be released in digital format. At first glance, e-books presented a challenge to the printing industry, however there were opportunities for publishers to integrate digital technology into their business models and remain profitable as society moved in the "paperless" direction.

CHAPTER 2

There were more than 20 electronic book readers on the market by the year 2009, and new product announcements or developments were being made each month. Growing competition in the e-book market would mean great things for the end user in terms of affordability and function. For e-textbooks the primary target market consisted of students. College students were paying more than ever to achieve a degree, so cost savings was a key

element in the adoption of e-textbook in the college classroom. According to the College Board, tuition and fees at private and public four-year schools rose 4.4 percent and 6 percent respectively from the years 2008-2009. For private institutions this was due in part because schools had seen their endowments diminish. Public schools were suffering from a decline in state funding, which had dropped 5.7 percent per student in 2009. One of the unavoidable costs students absorbed was the cost of textbooks. Digital content could be provided as fast and more cheaply than traditional hardback books in most cases. (Hane, Yousef)

Advances in reading devices and increased access to digital content were some of the reasons e-textbooks could successfully expand into higher education. E-book device manufacturers had been able to provide reading devices that were portable enough and affordable enough to satisfy consumers. Amazon, the market leader of early adopters in electronic books, released its Kindle DX in 2009. The new model might have been more expensive than previous Kindles at a cost of \$489, but larger screen and lightweight design made the device appealing to college students. Amazon had reduced its price of the original Kindle released in November 2007 to \$299, so less expensive alternatives were still available. Other competitors like Sony Reader had introduced two new readers to replace its previous models, also at a lower cost: the Reader Pocket Edition at \$199 and the Reader Touch Edition at \$299. Additionally, the company unveiled plans to release an e-book reader that featured 3G wireless and a 7 inch-wide touchscreen electronic ink display. Sony had also dropped the price for new releases and best sellers at its e-bookstore from \$11.99 to \$9.99 U.S. Paula Hane contended that late adopters to e-book devices would opt for the best deal for the best price. Many would simply use whatever device they already owned, such as the iPhone or other smart-phones or electronics capable of reading digital content. (Hane)

Terje Hillesund, in the peer-reviewed journal First Monday, discussed how the spread of e-book titles was influenced both by readers and publishers:

Diffusion of e-books among readers is heavily dependent on publishers. For a technology to be widespread, there must be a great and varied number of e-book titles available. It will be up to publishers to bring this variety to the market. There will be resistance since publishers have, after all, built their businesses and fortunes on the production of traditional books. The major concern among publishers is a reliable copy protection system that protects the publishers' investments in new technologies. (Hillesund)

Digital Rights Management (DRM) systems distribute rights among participants in an e-book transaction and provide a secure distribution of e-book titles, protecting copyrighted material against unauthorized duplication or reproduction. A DRM system is both an encryption and distribution system. (Hillesund)

The main problems of DRM are not technical, but social and cultural. Authors, readers, booksellers, libraries and authorities all claim their cultural and legal rights and some of these rights and interests are in conflict. A customer thinking of buying an e-book may want to keep her privacy and resist being registered in a remote database in Ohio or Paris. As the owner of an e-book, she may also want to give the book away, lend it to a friend or to make a copy or two for her own personal use, all of which may be in conflict with the terms a publisher wants to offer when selling the book. The publisher on the other hand does not want to lose sales due to perceived illegal copies of an e-book in circulation. (Hillesund)

Despite advances in information technology and the increased development of alternatives to traditional textbooks, publishers, educators and students were late to adopt e-books. Tom Davy, Chief Executive of Thomas Learning Europe, Middle East, Africa Publishing in the United Kingdom, contended that colleges and universities were much less market-driven, and slow to change. This could be attributed to trends that students were buying fewer and fewer textbooks due to a change in teaching philosophy and student expectations. Davy explained that educators promote independent learning, giving students more freedom, an approach that would better prepare students for the real world. This led to textbooks being loosely recommended and not deemed as mandatory text. The lack of prescribed textbooks forced students to use course handouts, library resources, and information online. Davy also asserted that students wanted results at a minimum cost, particularly as tuitions increased and mandatory fees were assessed to certain courses. Students desired what Davy referred to as just-in-time delivery of information – getting a chapter or article delivered directly to a student’s computer or electronic device as they need it. A student’s ability to receive easy and instant access to information online via Google or other online sources diminished the need for tangible textbooks. (Davy) Dr. Eric J. Simon, a professor of biology at Fordham College, conducted a study with his own students and found that 100 percent of the participants would recommend using e-books in college courses to a friend. The overwhelming majority of respondents indicated that the incorporation of digital textbooks results in a strong positive first user experience. Simon stated that in order for widespread acceptance of e-textbooks, publishers had to make titles more available and provide familiar and new features students expected from printed textbooks.

Table 1 showed advantages and disadvantages of traditional and digital textbook formats according to Tom Davy in his paper presented at the 30th UKSG Conference in 2007.

Textbooks	Digital
+ portable	+ i-pods, mobile phones
+ tactile	+ i-pods, mobile phones
+ no equipment required	+ ubiquitous items
+ text better on paper	+ e-paper, print on demand
+ organizing framework	+ learner journeys
- linear	+ interactive
- single medium	+ multiple media
- too much or too little	+ as much as you need
- single learning style	+ individual learning style

Table 1. Relative advantages (+) and disadvantages (-) of print and digital textbooks

Source: <http://serials.uksg.org/openurl.asp?genre=article&issn=0953-0460&volume=20&issue2&spage98>

Davy concluded that digital textbooks were far superior in terms of user friendliness, but the slow pace of adoption for digital alternatives related to the lack of development in creating easy to navigate learning objectives. Students could receive much better value for their money, but they had to be able to effectively learn the content. Also, University libraries and bookstores had to take a more active marketing approach to make their digital resources known. Davy explains that bookstores in particular had to re-invent themselves as general-purpose retailers with print-on-demand capabilities to further the distribution of digital textbooks. Davy expressed the need for publishers to “learn from community sites like MySpace, Facebook and YouTube and music sites like Napster and iTunes how content [was] packaged, accessed, mixed, shared

and consumed by today's 16-25 year-olds, people who [took] Web 2.0 applications for granted.”
(Davy)

CHAPTER 3

The evolution of the graphic arts from a craft based industry to a technology based industry signified the dependence of communication and the global acceptance of digital information on screen. E-books were proof of both industry and cultural change. In order to identify a student's satisfaction with e-books and to determine how electronic textbooks could be improved, I employed the descriptive research method and content analysis. According to Dr. Harvey Levenson, “Descriptive Research studies are designed to determine the nature of a situation as it exists at the time of the study. The aim is to describe, ‘what exists’ with respect to variables or conditions in a situation.” Content analysis “is a method for quantifying qualitative information gathered from [descriptive research]” (Levenson). As e-book technologies advanced, so too did the growing interest of consumers. Consumers, specifically students, had a desire to adopt and interact with the latest and greatest electronic devices. In my opinion, the most important consideration in whether or not electronic textbooks would be adopted by the masses for educational use was price. In order for electronic textbooks to be successful, there had to be a monetary advantage to using digital content in place of existing printed textbooks. Also, students needed the functionality, features, and available content of classic textbooks.

An electronic survey was constructed to determine the views and usage of e-books as well as the features people found most important. The survey was distributed online via email and through various social networking sites. The sample population was to be made up primarily of students from California Polytechnic State University. Surveys were to be distributed to the

College of Liberal Arts and Business. I attempted to provide a sample set that was culturally diverse while still representing the overall student population. The goal was to take a sample survey of 200 students with varying interests to come up with meaningful results and feedback.

The following steps were taken to gather and report data. First, survey questions were formulated and an online survey was set up using SurveyMonkey.com. The second step was to send invitations out via email to a list of approximately 500 students within the sample group. The invitations would be distributed to the two colleges as well as being posted and accessible through a link on Facebook. Survey invitations were also sent to clubs on campus whose members provided contrast to the sample set. Next, as surveys are filled out, data was gathered and compiled daily in a spreadsheet. The final step involved analyzing the data and including it in the content analysis.

The benefits of creating an online survey were that they were easy to take and data was immediately exported into a database. It was a more convenient and accessible way for the students to participate. This was a sample survey of tangibles where relevant information from a limited number of students was studied to make inferences about an entire population of students (Levenson).

The first part of the survey focused primarily on past e-book usage. This provided background on whether or not students had made use of e-books in the past.

Question 1: Are you knowledgeable/interested in e-books?

Yes
No

Question 2: How often do you shop for e-books if ever?

Everyday
A few times a week
A few times a month
Once a month
Once a year
Never

Question 3: What type of device do you read e-book titles on?

Computer (Laptop or Desktop)
Amazon Kindle
Sony Reader
Cell Phone
Other (please specify)

Question 4: If you are a reader of e-books are you satisfied, why or why not? If you have never read an e-book, why not?

Satisfied
Sort of Satisfied
Not Satisfied
Never read an e-book
Reason:

Question 5: Would you be opposed to using electronic textbooks in place of traditional paper textbooks? Why or why not?

Yes
No
Reason:

The next part of the survey determined the e-book features that students believed were most important. The features included: Cost of electronic books and reading devices; ability to move content from one device to another; wide selection of e-books; e-book retail site easy to navigate; ease of locating available titles; ease of download for purchased titles; availability of high quality e-book reading devices; ability to lend books to friends and family; ability to read in a comfortable sized font with little glare; improved convenience and portability over paper textbooks; multimedia enhancements such as video and audio.

Each feature was listed with a scale of importance that included “very important,” “important,” and “unimportant.” Selections were made both on consumer experience and expectations. Survey respondents were given the opportunity to comment or suggest improvements for retailers of e-books, digital content publishers, hardware vendors, and software vendors.

After collecting the survey data I was able to carry out a thorough content analysis. The data gathered from my survey provided me with information that could be quantified and converted to percentages in order to evaluate the overall response of my target population. The features were ranked from highest to lowest in order of importance. My content analysis determined the popularity of electronic books among college students, as well as what features

were most beneficial for students if used for educational purposes. The content analysis also highlighted opportunities for improvement that publishers and educators alike could take into account when using their resources for further research and development of electronic textbooks.

CHAPTER 4

The data for this study was conducted through a survey of students at California Polytechnic State University. The population sample was comprised of Graphic Communication students as well as students from multiple clubs and organizations on the University campus. Results of the survey were based on input from 85 students who submitted responses electronically via the Internet.

Prior to the survey, participants were given a prompt briefly describing the nature of the study and the purpose behind the questions involved. The prompt was as follows:

The objective of the survey is to determine the popularity of electronic books (e-books) among college students, as well as what features are most beneficial for students if used for educational purposes. There are more than 20 electronic book readers on the market today including the Amazon Kindle, Sony Reader, Barnes & Noble Nook and many more. If you had the option or opportunity to read all your textbooks on one of these devices or even your iPhone or Blackberry would you?

The first set of survey questions focused on identifying the students who had previously used e-books or e-textbooks. Specifically, each participant was asked, "Are you knowledgeable/interested in e-books?" and "if you are a reader of e-books are you

satisfied?” Upon identification of those students who had used e-books before, all participants were then asked to “rate the [provided] e-book/e-textbook features based on importance.”

The findings from each survey question are represented graphically below:

Figure 1. Survey question #1 results.

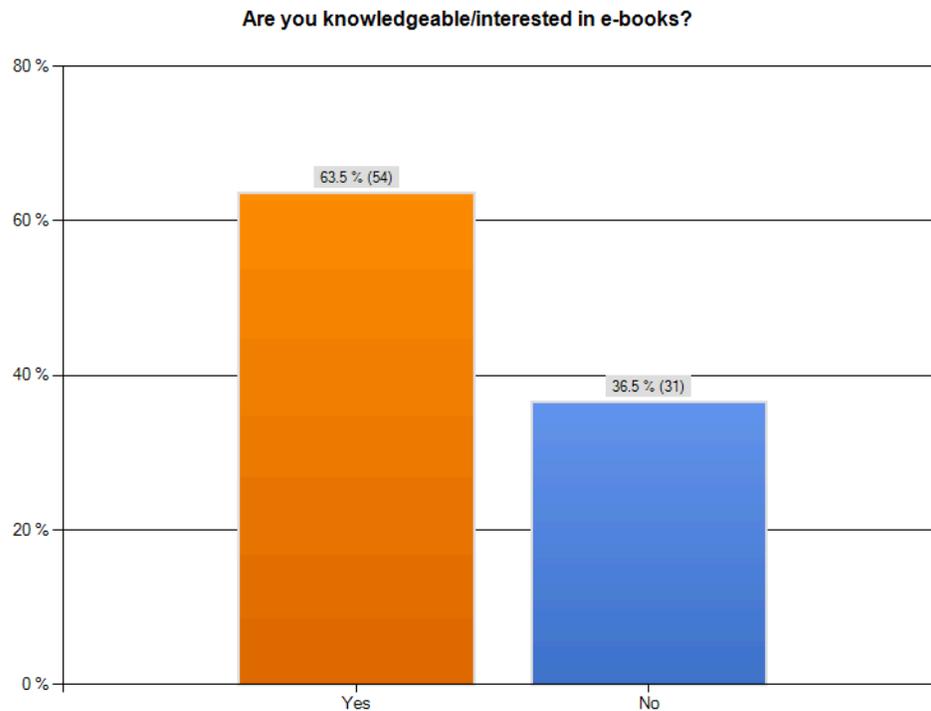


Figure 2. Survey question #2 results.

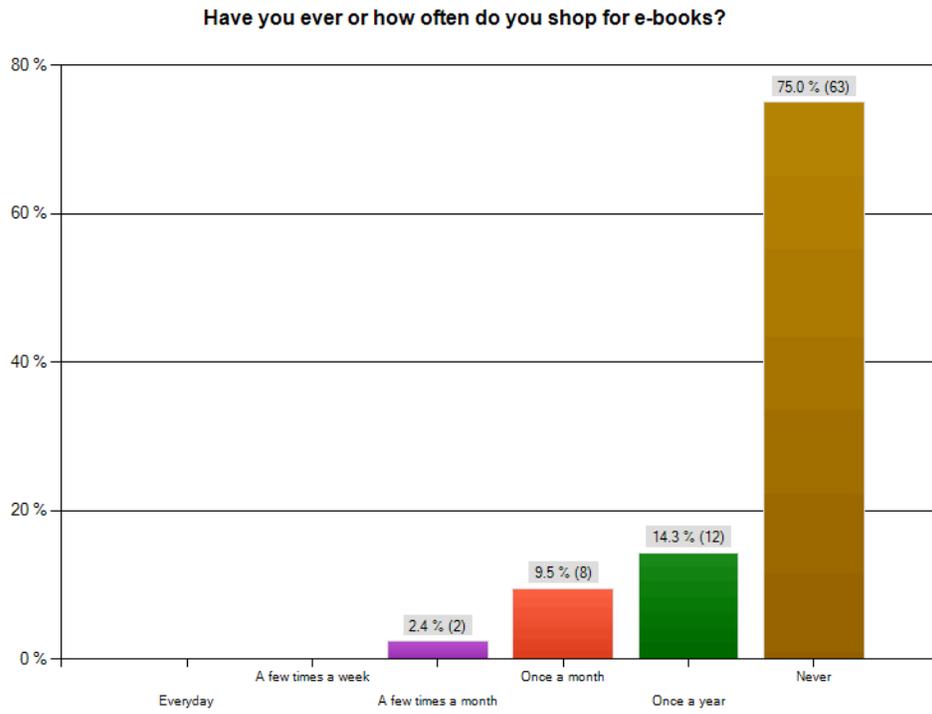


Figure 3. Survey question #3 results.

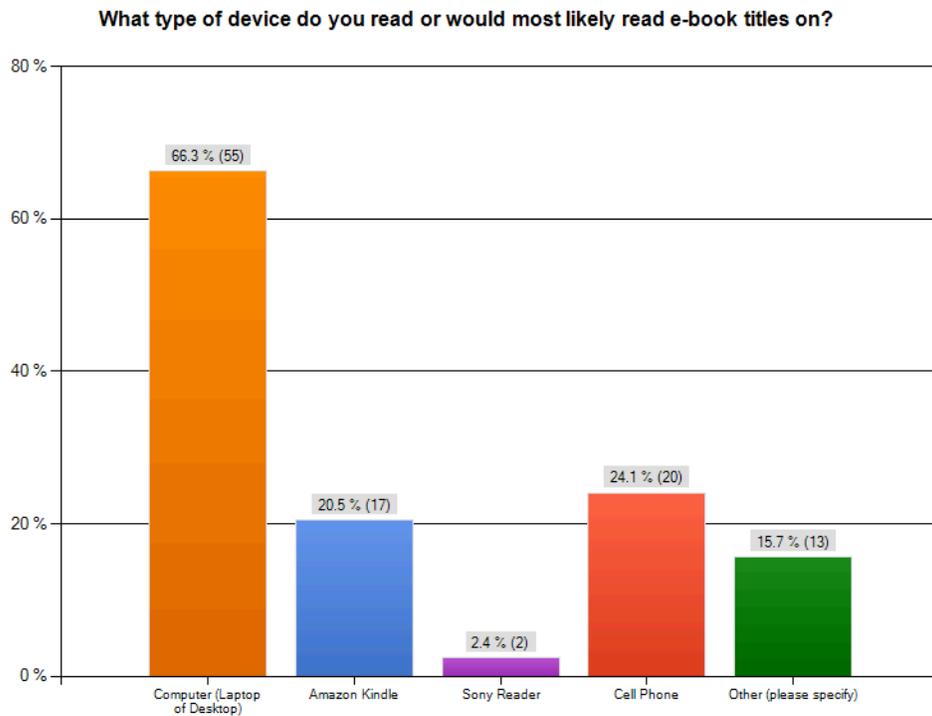


Figure 4. Survey question #4 results.

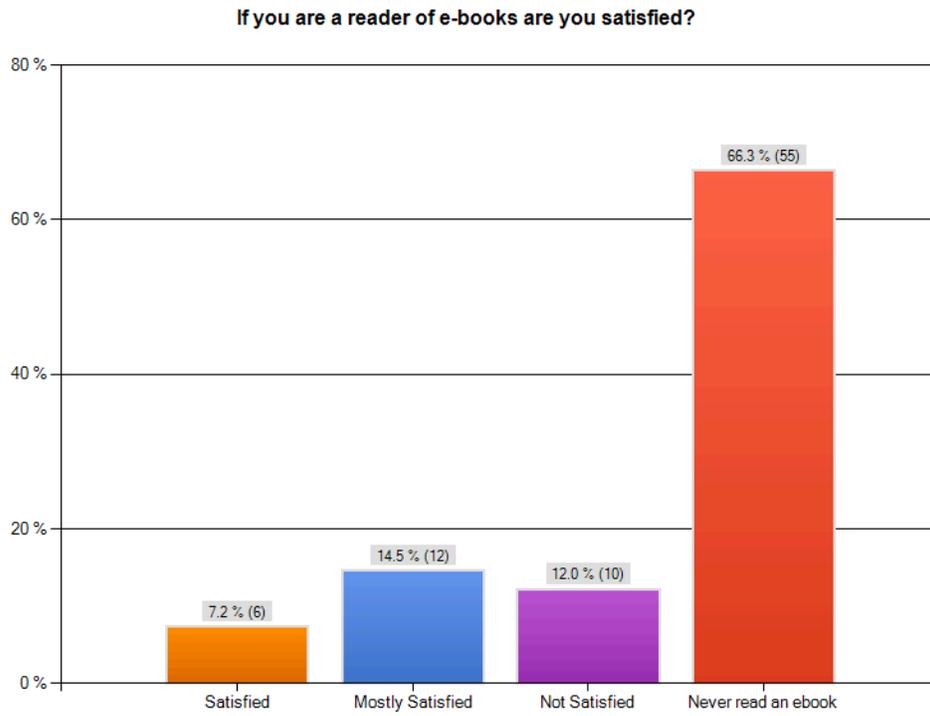


Figure 5. Survey question #5 results.

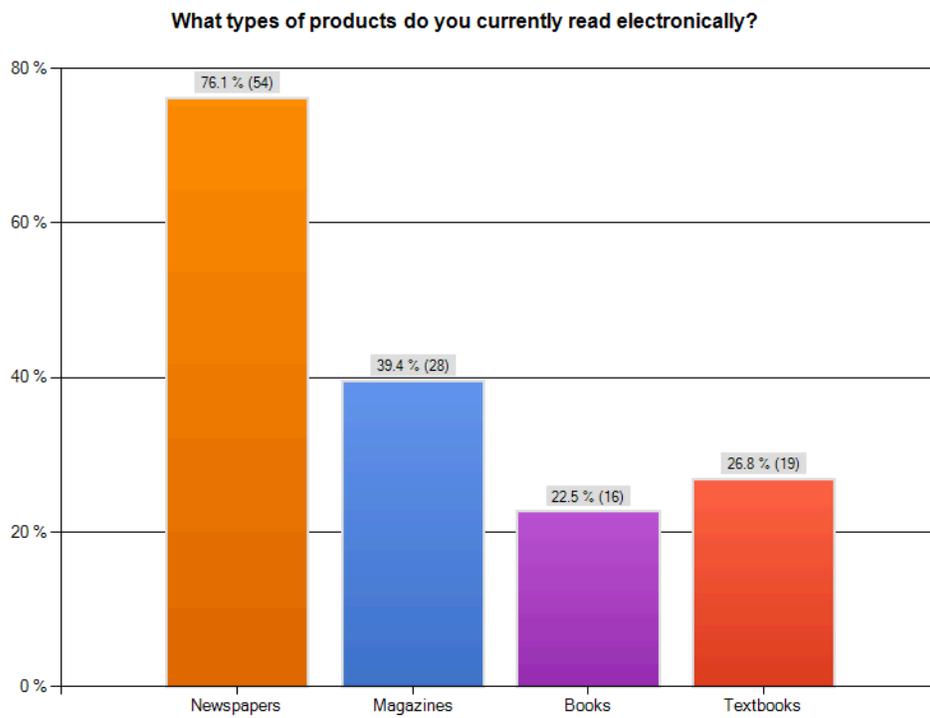


Figure 6. Survey question #6 results.

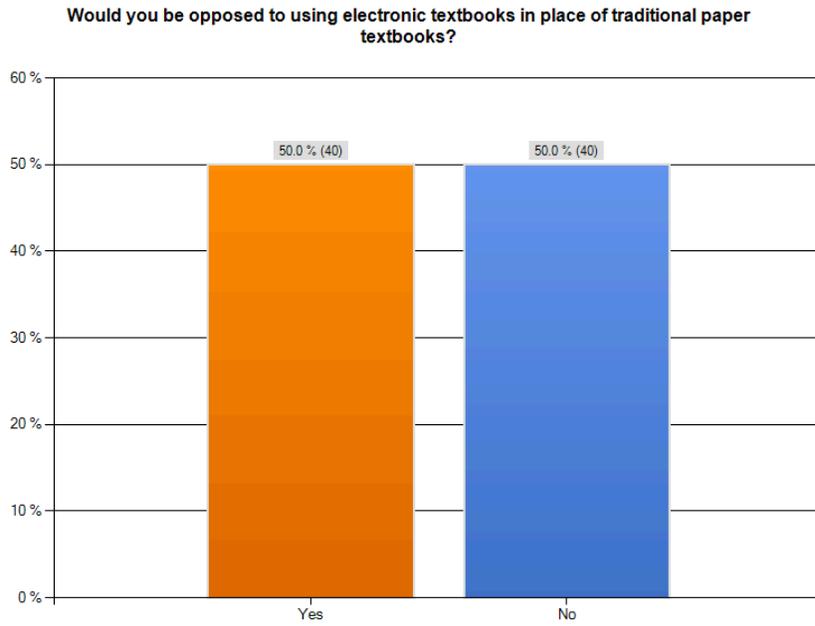
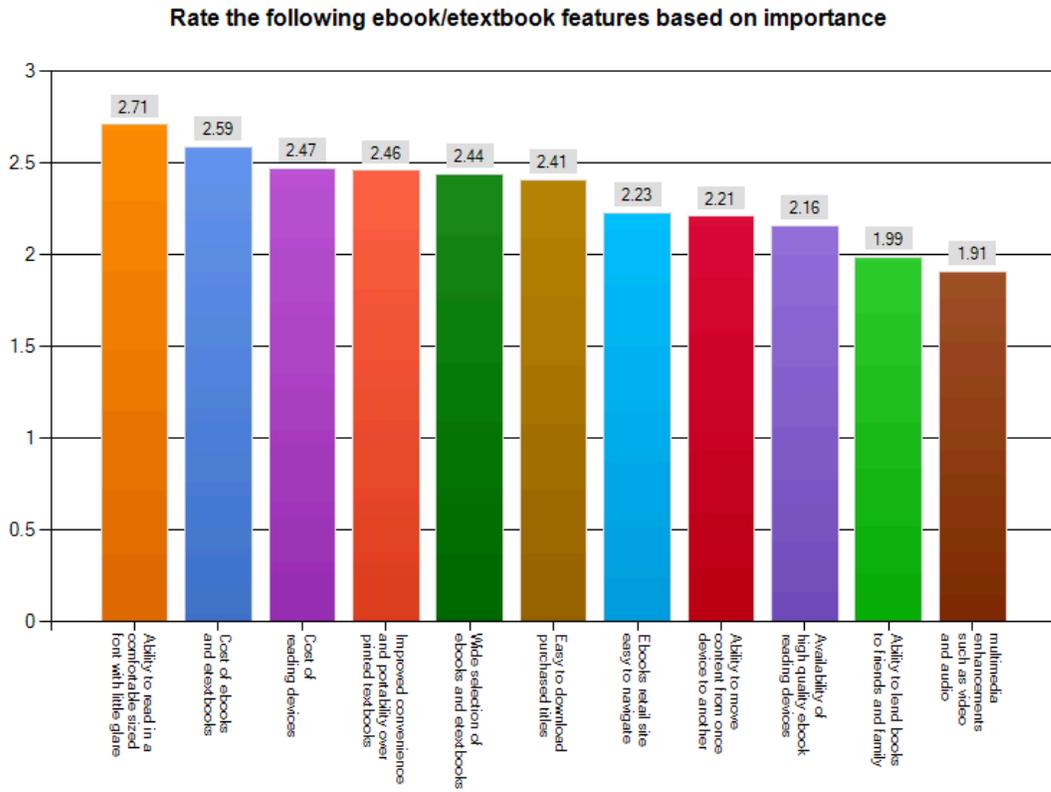


Figure 7. Survey question #7 results.



* Features were ranked based on the mean, which was derived from the ranking scale 1 (not important) to 3 (very important).

The data showed that students had varying opinions on electronic books. Roughly 64 percent of students expressed that they had prior knowledge of e-books or were interested in e-books. The remaining were assumed to have had no interest in e-books as an alternative means of accessing information for use in higher education. Despite the interest level of students, Figure 2 showed that only 25 percent of students shopped for e-book titles more than once a year. And of this 25 percent only two respondents of the 85 shopped for e-book titles more regularly than once a month.

When people hear the word “e-book,” many equate that with just the dedicated reading device, such as the Amazon Kindle or Sony Reader. Electronic books consist of actual content and are capable of being accessed through a number of devices. When asked, “what type of device do you read or would most likely read e-book titles on” about 66 percent of students answered computers. Dedicated reading devices (Amazon Kindle and Sony Reader) were selected by only 23 percent of students. Surprisingly, cell phones at 24 percent, was a more popular device for reading e-books on than the previously mentioned readers. It is interesting to note that of the 15 percent of students who answered other, many specified that they would read e-book titles on Apple’s iPad. Clearly, some of the students who participated in the survey were knowledgeable of new technologies on the market, possibly more so than other demographics. Figure 4 was designed to measure both the perceived satisfaction of e-books and to identify those students who had used e-books before. It could be assumed that students who responded with either “mostly satisfied,” “satisfied,” or “not satisfied” had all had previous e-book experience (33.7%). Those who answered, “Never read an e-book” could safely be eliminated as e-book users at the time the survey was distributed (66.3 %). People were asked to provide reasons for why they

were satisfied or not satisfied with their e-book experience. 38 students provided a reason and the following were excerpts from survey question 4.

Satisfied and mostly satisfied users:

- “The screen (my phone) can be too small sometimes, but it's nice and convenient.”
- “Though I am rather inexperienced with e-books, mostly due to my lack of desire for recreational reading. I read many reports, news, an occasional book for a class, and would prefer my textbook to be electronic. The cost effectiveness and easy accessibility are most attractive, however I do feel that it is a more difficult to read text electronically. Lastly, though I don't know the specifics of the Kindle or Sony Reader, not being able to bookmark, highlight, and take notes make it less efficient in comparison to traditional print textbooks.”
- “I find reading an e-book for text that I read start to finish (like novels) enjoyable. But for reference materials I like to have a hard copy to reference.”

Not satisfied users:

- “Hurts my eyes to read the screen, I have to stay connected to a power source. Can't take it to the beach. Hard to read at night or in bright daylight. Can't make notations. How do you source if there are no publishers or page numbers? Really hard to find where you left off or go back and read something again that you read before hand. The whole thing seems really cold/impersonal. I like real novels because I can really get into it more and I feel like there is a closer connection with the author. Also, with electronics, you can't just throw them in your book bag and you have to sit up and read it so formally. I can't lay down and read them like I can with a book.”

- “I tried to read an e-book once and the quality/feel of the book was not satisfactory. It was uncomfortable and hurt my eyes. I went out a few days later and bought that same book in printed form.”
- “Textbooks seem easier to navigate through and don't lead to distractions that an e-book might entail.”
- “Too much money to buy a reader.”

Generally, reasons why users were satisfied with e-books included convenience, accessibility, and the cost effectiveness of e-book content. Reasons why users were not satisfied included discomfort in viewing the display, not being able to connect with an e-book like you can with a tangible copy, and users felt they would become distracted by the electronic format. Other reasons referred to the need for improved features to aid in learning and the need to lower reading device prices.

Data collected from Figure 5 showed that nearly 26 percent of students had used e-textbooks before, however the largest number of students read newspapers electronically (75%). When asked, “would you be opposed to using electronic textbooks in place of traditional paper textbooks,” the sample population was split exactly down the middle (40 students responded “yes,” 40 responded “no”). The reasons for their choices were nearly identical to the aforementioned reasons for user satisfaction, with cost being a major determinant.

The final survey question, graphically displayed in Figure 7, asked students to rate e-book/e-textbook features based on importance. The features were ranked based on the mean, which was derived from the ranking scale 1 (not important) to 3 (very important). From the data it was determined that a majority of respondents indicated, in decreasing

order of importance, that the ability to read in a comfortable sized font with little glare, cost of e-books and e-textbooks, cost of reading devices, and improved convenience and portability over printed textbooks were the most important potential features. The least important features according to those surveyed included the addition of multimedia enhancements such as video and audio, the ability to lend books to friends and family, the availability of high quality e-book reading devices, and the ability to move content from once device to another.

Because it could be hypothesized that students who had never read an e-book might rank features differently than students who had read an e-book, a cross tabulation analysis was conducted to see if there was a significant relationship. Of the 11 total features it was determined that the importance of having a wide selection of e-book titles to choose from differed the most among e-book readers and non-e-book readers. This is evident in the Table 3 below.

Table 3. Read an e-book or not, wide selection of e-book and e-textbook titles

	Not Important	Important	Very important	All
Never read an e-book	1 1.96%	20 39.22%	30 58.82%	51 100%
Yes, read an e-book	3 10.00%	17 56.67%	10 33.33%	30 100%
All	4 4.94%	37 45.68%	40 49.38%	81 100%

*Cell contents: count, % of row

50 percent of the total respondents felt that having a wide selection of e-book and e-textbook titles was very important. In contrast, only 33 percent of students who had actually read an e-book believed that having a wide selection was important. This variation maybe attributed to e-book users being able to find titles easily, while students who had never shopped for e-books assumed their requested titles would be unavailable. The

statistical work for this cross tabulation as well as the results from the survey can be found in its entirety in the appendix of this report.

CHAPTER 5

As seen in the data, students are divided on the prospect of using electronic textbooks in the college landscape. Both user experience and perception contributed to a list of features that students believed to be most beneficial. The motivation behind using e-textbooks was mainly for convenience and long term cost savings. The majority of students acknowledged that cost, of both reading devices and books, was most important. Currently, the electronic book industry is highly competitive, and a way for publishers and device manufactures to capture a greater percentage of the market would be to focus on providing affordable products.

Another limitation to e-textbook implementation is students' loyalty to printed textbooks. Several trends are clear, students value portability and comfort. They indicated that the tangible properties of a paper textbook allowed for greater mobility in terms of where one was able to read. Glare and the lack of a power source limited the use of e-books outdoors and in other situations.

Students have grown accustomed to accessing information on the Internet; nearly 75 percent of students receive their news electronically. These same students have developed the ability to read on screen and retain information. If this can be translated to learning on screen, e-textbooks could be adopted by the masses. Furthermore, college professors could use electronic textbooks as a reliable teaching tool.

However, for e-books to continue to grow and aid in learning for students, device manufacturers and content publishers must continue to maintain credibility with consumers and ensure that e-books offer functions and convenience beyond that of traditional textbooks.

Further analysis on students' willingness to pay for e-books would be beneficial in understanding ways to maximize the financial benefit to students. Based on the research in this study, access to cash and resistance to change are some of the more influential factors that can affect e-book adoption by students.

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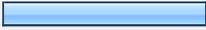
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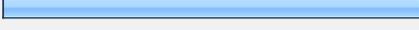
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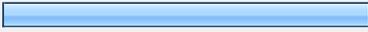
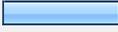
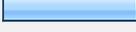
APPENDIX

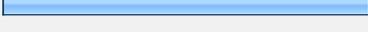
SURVEY RESULTS

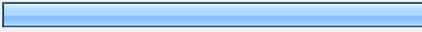
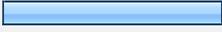
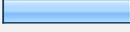
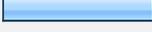
E-books: Replacing Traditional Textbooks

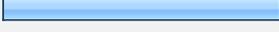
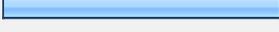
1. Are you knowledgeable/interested in e-books?			Response Percent	Response Count
Yes			63.5%	54
No			36.5%	31
			<i>answered question</i>	85
			<i>skipped question</i>	0

2. Have you ever or how often do you shop for e-books?			Response Percent	Response Count
Everyday			0.0%	0
A few times a week			0.0%	0
A few times a month			2.4%	2
Once a month			9.5%	8
Once a year			14.3%	12
Never			75.0%	63
			<i>answered question</i>	84
			<i>skipped question</i>	1

3. What type of device do you read or would most likely read e-book titles on?			
		Response Percent	Response Count
Computer (Laptop or Desktop)		66.3%	55
Amazon Kindle		20.5%	17
Sony Reader		2.4%	2
Cell Phone		24.1%	20
Other (please specify)		15.7%	13
answered question			83
skipped question			2

4. If you are a reader of e-books are you satisfied, why or why not? If you have never read an e-book, why not?			
		Response Percent	Response Count
Satisfied		7.2%	6
Mostly Satisfied		14.5%	12
Not Satisfied		12.0%	10
Never read an ebook		66.3%	55
Reason			38
answered question			83
skipped question			2

5. What types of products do you currently read electronically?			
		Response Percent	Response Count
Newspapers		76.1%	54
Magazines		39.4%	28
Books		22.5%	16
Textbooks		26.8%	19
Other (please specify)			7
answered question			71
skipped question			14

6. Would you be opposed to using electronic textbooks in place of traditional paper textbooks? Why or why not?			
		Response Percent	Response Count
Yes		50.0%	40
No		50.0%	40
Reason:			63
answered question			80
skipped question			5

7. Rate the following ebook/etextbook features based on importance					
	Not Important	Important	Very Important	Rating Average	Response Count
Cost of ebooks and etextbooks	4.9% (4)	30.9% (25)	64.2% (52)	2.59	81
Cost of reading devices	9.9% (8)	33.3% (27)	56.8% (46)	2.47	81
Ability to move content from once device to another	16.0% (13)	46.9% (38)	37.0% (30)	2.21	81
Wide selection of ebooks and etextbooks	4.9% (4)	45.7% (37)	49.4% (40)	2.44	81
Ebooks retail site easy to navigate	11.1% (9)	54.3% (44)	34.6% (28)	2.23	81
Easy to download purchased titles	3.7% (3)	51.9% (42)	44.4% (36)	2.41	81
Availability of high quality ebook reading devices	14.8% (12)	54.3% (44)	30.9% (25)	2.16	81
Ability to lend books to friends and family	22.2% (18)	56.8% (46)	21.0% (17)	1.99	81
Ability to read in a comfortable sized font with little glare	1.3% (1)	26.3% (21)	72.5% (58)	2.71	80
multimedia enhancements such as video and audio	27.5% (22)	53.8% (43)	18.8% (15)	1.91	80
Improved convenience and portability over printed textbooks	5.1% (4)	43.6% (34)	51.3% (40)	2.46	78
Any other features you believe to be important?					4
answered question					81
skipped question					4

CROSS TABULATION ANALYSIS

Table 1. Read an e-book or not, cost of e-books and e-textbooks

	Not Important	Important	Very important	All
Never read an e-book	16 31.37%	1 1.96%	34 66.67%	51 100%
Yes, read an e-book	9 30.00%	3 10.00%	18 60.00%	30 100%
All	25 30.86%	4 4.94%	52 64.20%	81 100%

*Cell contents: count, % of row

Table 2. Read an e-book or not, ability to move content from one device to another

	Not Important	Important	Very important	All
Never read an e-book	7 13.73%	27 52.94%	17 33.33%	51 100%
Yes, read an e-book	6 20.00%	11 36.67%	13 43.33%	30 100%
All	13 16.05%	38 46.91%	30 37.04%	81 100%

*Cell contents: count, % of row

Table 3. Read an e-book or not, wide selection of e-book and e-textbook titles

	Not Important	Important	Very important	All
Never read an e-book	1 1.96%	20 39.22%	30 58.82%	51 100%
Yes, read an e-book	3 10.00%	17 56.67%	10 33.33%	30 100%
All	4 4.94%	37 45.68%	40 49.38%	81 100%

*Cell contents: count, % of row

Table 4. Read an e-book or not, e-book retail site easy to navigate

	Not Important	Important	Very important	All
Never read an e-book	5 9.80%	26 50.98%	20 39.22%	51 100%
Yes, read an e-book	4 13.33%	18 60.00%	8 26.67%	30 100%
All	9 11.11%	44 54.32%	28 34.57%	81 100%

*Cell contents: count, % of row

Table 5. Read an e-book or not, easy to download purchased titles

	Not Important	Important	Very important	All
Never read an e-book	3 5.88%	25 49.02%	23 45.10%	51 100%
Yes, read an e-book	0 0.00%	17 56.57%	13 43.33%	30 100%
All	3 3.70%	42 51.85%	36 44.44%	81 100%

*Cell contents: count, % of row

Table 6. Read an e-book or not, availability of high quality e-book devices

	Not Important	Important	Very important	All
Never read an e-book	4 7.84%	31 60.78%	16 31.37%	51 100%
Yes, read an e-book	8 26.67%	13 43.33%	9 30.00%	30 100%
All	12 14.81%	44 54.32%	25 30.86%	81 100%

*Cell contents: count, % of row

Table 7. Read an e-book or not, ability to lend e-books to friends and family

	Not Important	Important	Very important	All
Never read an e-book	11 21.57%	30 58.82%	10 19.61%	51 100%
Yes, read an e-book	7 23.33%	16 53.33%	7 23.33%	30 100%
All	46 56.79%	18 22.22%	17 20.99%	81 100%

*Cell contents: count, % of row

Table 8. Read an e-book or not, ability to read in a comfortable sized font with little glare

	Not Important	Important	Very important	All
Never read an e-book	1 2.00%	11 22.00%	38 76.00%	50 100%
Yes, read an e-book	0 0.00%	10 33.33%	20 66.67%	30 100%
All	1 1.25%	21 26.25%	58 72.50%	80 100%

*Cell contents: count, % of row

Table 9. Read an e-book or not, multimedia enhancements such as video and audio

	Not Important	Important	Very important	All
Never read an e-book	9 18.00%	30 60.00%	11 22.00%	50 100%
Yes, read an e-book	13 43.33%	13 43.33%	4 13.33%	30 100%
All	22 27.50%	43 53.75%	15 18.75%	80 100%

*Cell contents: count, % of row

Table 10. Read an e-book or not, improved convenience and portability over traditional textbooks

	Not Important	Important	Very important	All
Never read an e-book	3 6.00%	21 42.00%	26 52.00%	50 100%
Yes, read an e-book	1 3.57%	13 46.43%	14 50.00%	28 100%
All	4 5.13%	34 43.59%	40 51.28	78 100%

*Cell contents: count, % of row