Kindle DX: Amazon's Latest Ebook Reader

by NANCY K. HERTHER

Ebooks and ebook readers have become hot items this year for everyone from commuters to students to tool-crazed CEOs.

In June, market leader Amazon released the Kindle DX, which includes some impressive new features. This latest version has a larger screen and better support for PDF files, making it worthwhile for information professionals to take another look at these mobile information tools. The DX is slim (slightly more than one-third of an inch thick) and well-designed. However, Amazon is still faltering as it tries to balance concerns with publishers' digital rights and its efforts to develop new educational markets while broadening Kindle's penetration in the marketplace by providing new content.

Major enhancements include several features: a larger (9.7") screen, a sleek design, a text-to-speech capability that allows users to view the screen horizon-

tally or vertically, a new five-way control button (replacing the slide scroller), increased onboard storage, and the ability to send Word, text, .jpeg, or PDF files to Kindle using the miniature USB port.

Kindle DX also continues the tradition of providing E Ink resolution. Users now have wireless, anytime access to the web, they can play MP3 music, or they can access the Kindle Store to get books, subscriptions to 37 newspapers (often without photos, ads, comics, and crosswords), dozens of popular magazines, and about 1,500 selected blogs.

Comments From the Intended Audience

Since students are a targeted market for the DX, I focused in on a few of them to get their opinions on Kindle's value. I interviewed six college and four high school students who had mixed reactions to the Kindle DX. Students liked the fact that they could listen to music, especially

with headphones. Most liked the idea that this might replace some of their heavy textbooks and required readings, and they all liked the screen resolution. Most felt that a hypertext note-taking option was still needed as a more natural way to work with printed textbooks.

But many students complained about the lack of color. Even textbooks have color, especially for those covering the sciences. Many also asked how websites (both personal favorites as well as those for coursework) would look on the Kindle screen without color.

One important consideration is the price. The DX costs nearly $500, but that's not the only downside. The students also noted that the DX weighs more than previous versions and doesn't allow users to zoom or scroll PDF documents. It also has a poorly designed key-

The Kindle DX can store up to 3,500 books.

board that's just too small to use efficiently. Instead of a standard-type keyboard, students suggested that a touch-screen would be better for their use. Complicated web searching was also difficult and note-taking suffered as well.

Kindle DX comes with a miniature USB port and an adapter so users can transfer files to a PC; however, the encoding makes cutting and pasting quotes or other materials almost impossible. On a positive note, your own materials (PDF, Word files, and so on) will transfer back and forth.

Comparing Kindle, Kindle2, and Kindle DX

	Kindle	Kindle2	Kindle DX
Launch Date	11/19/07	2/24/09	6/10/09
Initial Price	$399	$359**	$489
Availability	U.S.	U.S.	U.S.
Dimensions	7.5"x5.3"x.0.7"	8"x5.3"x0.36"	10.4"x7.2"x0.38"
Weight	10.3 oz.	10.2 oz.	18.9 oz.
Screen Diagonal Size	6"	6"	9.7"
Screen Resolution	600x800 pixels	600x800 pixels	824x1200 pixels
E Paper Display	E Ink	E Ink	E Ink
Established Battery Life*	48 hours	96 hours	4 days or up to 2 weeks
Gray Levels	4	16	16
Operating System	Linux Kernel	Linux 2.6.22	Linux 2.6.22.19
Dynamic Memory	64MB RAM	128MB RAM	128MB RAM
Internal Storage	256MB	2GB Flash	8MB NOR Flash; 4GB NAND Flash
Input Devices	Keyboard & LCD side scroller	Keyboard & 5-way control button	Keyboard & 5-way control button
Supported Formats	Kindle (.azw), .txt & unprotected Mobipocket (.mobi, .prc)	Kindle (.azw & topaz), .prc/.mobi, .txt, MP3, Audible HTML, DOC, JPEG, GIF, PNG, BMP through conversion	Kindle (.azw & topaz), .prc/.mobi (non-DRAM), .txt, pdf, Audible, MP3 HTML, DOC, RTF, JPEG, GIF, PNG, BMP through conversion
Memory Expansion Slot	Yes	No	No
Text to Speech	No	Yes	Yes
Font Sizes	4	6	6
Available Title Catalog	300,000-plus	300,000-plus	300,000-plus
Maximum Number of Books Stored	200	1,500-plus	3,500
Full-Text Searching	No	No	No
Expansion Slots	SD slot	None	None

*Battery life depends on usage.
** Price reduced to $299 on July 8, 2009

Many also wondered about the DX's longevity. Textbooks can be dropped, tossed on a table, or kept in a pile, but what about the DX? As one student said, "[T]his just isn't built for the way I work—unless you get a killer warranty or something." Most felt that a netbook, a low-end laptop, or their existing systems would be a more flexible, cost-effective choice.

Some Additional Notes

For academic audiences, positioning the Kindle DX as a productivity tool is problematic for Amazon. The lack of color and any real ability to organize and search meaningfully through a growing collection of information on the Kindle is a problem that needs to be addressed if Amazon hopes to wean people off their computers (or printed books) for reading.

Page turning on the DX is still slow, and documents feel incredibly static without hyperlinks, color options, easy browsing, and quick targeted searching. Students need to read, easily mark, link, annotate, and highlight text. They also need to make connections seamlessly between passages in different materials,

Both the Kindle2 and the Kindle DX offer a full keyboard and a 5-way control button.

The Kindle2 offers more storage capacity than the Kindle without the bulk.

The Kindle DX, at right, is taller, wider, and heavier than the Kindle2.

along with cutting and pasting quoted passages into their papers. The catalog of available serial titles is far too limited to appeal to this demographic group or to meet their scholarly needs for information.

The Digital Future

Amazon is still offering many features that will truly be the future of computing: unlimited access to the web anytime, anywhere; E Ink will eventually supply a high-quality display, and the smaller format is key to the evolving convergence of digital products.

However, the future will certainly also include many functions that are not on Kindle, including hyperlinking (even doing your own hyperlinking to make connections between text or other information), on-screen manipulation (that doesn't require a keyboard for navigation, such as Apple's iPhone and iPod touch interface), and a usable keyboard (with a number pad for scientific calculations that allows people to capture their thoughts, ideas, or communicate with others). It is this seamless move-

ment of information and ideas between people and devices that is the heart of convergence, as well as the basis of creativity and learning.

But issues still remain for Amazon and the ebook industry to address for this marketplace:

- **Digital Rights Management**— Just as the music industry suffered until Apple came up with a new distribution model, publishers need to come up with a new model for pricing and providing textual content to meet user expectations.

- **Amazon's growing empire**—Is Amazon a provider of content (books, magazines, and so on)? Is it a hardware manufacturer? Publishers see Amazon as having a hold on pricing already. Rather than trying to do both content and hardware, perhaps the ebook hardware division could be handled better through a spin-off company to avoid charges of conflicting interests or monopolistic activity.

- **Focus on the marketplace**— The Justin Gawronski incident (www.examiner.com/x-14868-Knoxville-Books-Examiner~y 2009m8d2-Kindle-faces-a-lawsuit), which describes how Amazon removed purchased materials from Kindles without users' consent or prior knowledge, is a major blow to customer confidence. Here is a company that claims to be addressing the needs of students, and it does not have a system that separates purchased content from users' notes and annotations. After all, isn't this the student's intellectual property? Academics care about the First Amendment, realizing that innovation and change come only with insight,

The Kindle DX has controls conveniently located on the right edge.

Ebook readers can bring The New York Times *right into a user's hands.*

learning, and discovery. Perhaps it's time for Amazon to champion these ideals and to better address academic needs, if it wants to be successful in this market.

Today, most people who are buying ebook devices are older (35–60 years old) and using these systems to enhance existing content on-the-go, according to the "Ebook User Survey 2006" from the International Digital Publishing Forum. For information professionals on-the-go, Kindle's Whispernet, anytime, anywhere access to the internet gives a hint of a future with universal, global web access. The size, weight, and design are impressive. Adding news coverage to the available content makes this an interesting option for travel or vacation use. The easier process for loading PDFs and other documents makes this a useful mobile office option when users don't need full computer access or features.

Here's the bottom line. The DX offers some key features over the Kindle2, but since it costs nearly $200 more, the value of these enhancements is questionable, especially if price-sensitive students are indeed one of the targeted markets.

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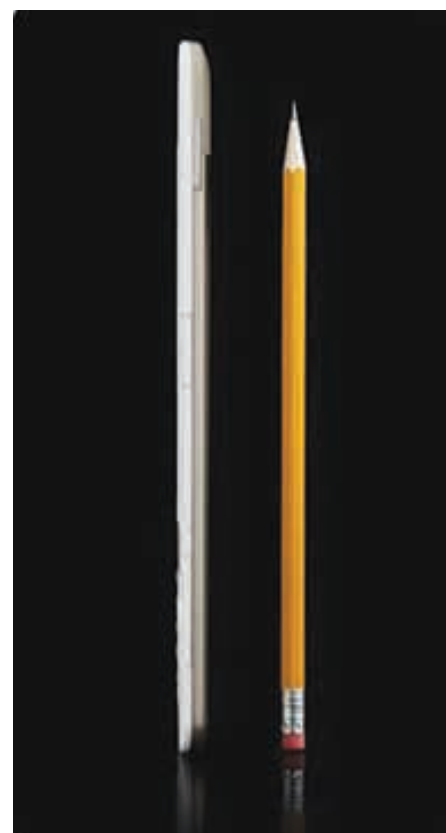
The wafer-thin Kindle2 is compact and lightweight.