

# TOOLS of the TRADE



## Lenovo Convertible Notebooks

Lenovo has released a family of four new convertible laptop-tablet combinations. The ThinkPad Twist, illustrated above, shows the 12.5-inch touch-sensitive screen turned for work collaboration or presentation. Like the others in this new family of ultrabook computers, the Twist incorporates the new Windows 8 with multi-finger gesture control. The Twist has a 12.5" high-definition screen and Dolby Home Theater audio. For business-class productivity, the Twist offers configurations up to third generation Intel Core i7 processors, Windows 8 Pro, optional 3G, storage up to 500GB or 128GB solid state drives, and dedicated software tools for small business, including Lenovo Solutions for Small Business powered by Intel Small Business

Advance and Lenovo Cloud Storage by SugarSync. The other convertibles include the IdeaPad Yoga 13, which also features a 360° hinge to swivel the screen from laptop to tablet, the IdeaPad Yoga 11 with a smaller screen and slimmer profile—it's the slimmest multi-mode PC—and the IdeaPad Lynx. The lightweight Lynx is a tablet with an 11.6" multi-touch screen, Windows 8, a dual-core Intel Atom processor, and a separate keyboard to which it can be attached when you're back home. The tablet functions as a PC that can produce MS Word docs, PowerPoint presentations, and Excel spreadsheets. Check all four models at [www.lenovo.com](http://www.lenovo.com).

## Apple iPod Touch 5

The fifth generation iPod Touch was released at the same time as the new Apple iPhone 5. It's the most revolutionary iPod to date, and to call it an MP3 player is to miss most of what it is. Thinner than the new iPhone, it has the same larger, four-inch high-definition multi-touch Retina screen and an

aluminum body. Running iOS 6, the iPod 5 takes advantage of the hundreds of new features that the new operating system brings to the iPhone. One difference is that the iPod has a dual-core A5 chip while the iPhone has a new A6 processor. Siri, the voice-activated assistant/search tool is on both devices. The new iSight camera on the iPod has five megapixels, seven times more than the previous camera, and it shoots 1,080 HD video as well as stills. The still camera features advanced optics, tap to focus, face detection, an LED flash, and the panorama function that will take series of stitched images. A photo app



provides on-board editing, or you can download a number of other apps, including Apple's iPhoto or iMovie, from the App store. The store has 700,000 apps, including more than 100,000 games. The battery life provides up to 40 hours of music or eight hours of video on a single charge. The iPod 5 is available in five colors, and the EarPods have a new design for greater comfort and better sound. The Wi-Fi is 802.11 a/b/g/n; Bluetooth is 4.0; and you can get a 32GB or 64GB version. [www.Apple.com](http://www.Apple.com)

## Kindle PaperWhite e-Reader

The latest Kindle PaperWhite reader has a higher resolution, higher contrast e-Ink display that also has a built-in light to illuminate the screen for reading in any environment, lighted or dark. You can read without glare in full sunlight, and you can adjust the brightness when reading in the dark. The increased resolution has 62% more pixels for much sharper text, and, along with the 25% improvement in contrast, it creates a page that's as clear as any print on paper.

# TECH FORUM

## A New Kind of Book and a Really Cheap Reader

By Michael Castelluccio, Editor

At the recent international book fair in Frankfurt, Germany (October 10-14), there was the usual anxious speculation about the future of book publishing. As bits replace ink, the disruption increasingly affects traditional bookstores, methods of distribution, and pricing. Disintermediation in the industry, which sounds like disintegration, is doing just that—breaking down the supply chain. Douglas Schatz of Maple Leaf Consultants points out, “The traditional book retailer is being bypassed by direct digital supply.” And with the digital self-publishing phenomenon offering a much easier path than the vanity presses of the past, Schatz says, “So too the roles of author, agent, and publisher are changing with new channels of communication now possible between content creator and reader or customer.”

The same digital upheaval that’s emptying newspaper pressrooms around the country is kicking up a lot of dust in the book trade. Two recent developments are likely to accelerate even more extensive changes for hardbound copy. The latest version of the EPUB formatting (v. 3) for digital publications is ready to start turning out a new kind of book, and an e-Ink reader debuted at the Frankfurt Fair that’s reported to retail at less than \$15.

### NEW BOOKS

There are quite a number of different file types that can be used to produce e-books, but the field has been recently winnowed down to three that are the most popular—EPUB, Mobi, and PDF. Because PDF books are fixed and don’t reflow in your reader, they’re annoying when you want to do something like increase the type size. Mobi is the format used by Amazon for its Kindle publications, and the aging technology is proprietary and likely wouldn’t have the circulation it has without a par-

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### Logitech Speaker Lapdesk

The Logitech Lapdesk N700 improves on the “laptop” design of notebooks. It has integrated stereo speakers, a built-in fan to dissipate the heat a laptop can generate when processing streaming video, and there’s a padded base for comfort. The built-in speakers have two-inch high-performance neodymium drivers, and they connect through a single USB cable on the side. The speakers are positioned on either side of your laptop. The quiet fan is protected from dust or damage by a grill, and it circulates air under your computer. The Lapdesk requires no software for setup and no batteries. There are volume controls for the speakers and an on/off switch for the fan. [www.logitech.com](http://www.logitech.com)

Even the fonts have been improved, with six font styles to choose from that adjust to any of eight different sizes. The battery lasts up to eight weeks, even with the light turned on. The Wi-Fi connection lets you download books in under a minute at home or at AT&T hotspots around town. There’s also a 3G version of the PaperWhite. The Amazon store provides access to more than a million titles, including books, magazines, and newspapers, and it has 180,000 Kindle-exclusive titles. The Kindle’s on-board memory will store up to 1,100 books. The touch screen has EasyReach tap zones for easy page turning. The reader weighs only 7.5 ounces, and it’s 6.7" × 4.6" × 0.36".

[www.amazon.com/kindle](http://www.amazon.com/kindle)



ent like Amazon supporting both its content and the formatting.

Then there's the EPUB format. The most popular, it's becoming the world standard as a general-purpose document format that can be applied to books, magazines, reports, and most other kinds of published papers. The name is a contraction of the words "Electronic PUBLISHing," and EPUB 3 is the latest revision of the standard. This latest iteration is the result of a rewrite begun in the summer of 2010.

Just as with Word docs and Excel sheets that you prepare with HTML and CSS (Cascading Style Sheets) markup systems in order to put online, e-books need the same kind of embedded sets of instructions to allow for an e-reader to correctly display text, charts, and illustrations. The advantage of a universal set of instructions that will display on all devices is obvious. Hence the appeal of the EPUB standard, which has been developed and maintained as an open source project.

Anyone who is responsible for publishing anything digital should take a closer look at what you can do with this new format. EPUB 3 is truly revolutionary in the kind of books it can build—from a straightforward print of a popular novel that has an audio copy layered on the same pages, allowing you to switch between reading and being read to, to textbooks that provide on-page interactive calculations in math books or video of procedures for the experiment in the chem lab manual you are flipping through on your iPad.

EPUB 2, the immediate predecessor, works well with e-Ink dedicated readers, but with the explosion of tablets, beginning with the iPad, changes in the formatting were needed to take advantage of what tablet computers can do.

O'Reilly Books has a brief introduction titled *What Is EPUB 3?* by Matt Garrish. It's free and can be downloaded at <http://shop.oreilly.com/product/0636920022442.do>. It gets a little technical, but Garrish does a good job profiling the new standard, and he's brief—24 pages.

The current EPUB 2 supports four formatting standards: two from the Web (XHTML and CSS), along with XML and ZIP. EPUB 3 supports a dozen formatting standards and has multimedia built in. Built on HTML5, the standard lets you



embed audio and video elements in the work. There's no need to go out for a player, because there's support for the MP3 format built in. Something called the SMIL specification lets you layer audio content on the print content so that you can synchronize and switch between the two.

JavaScript is one of the more important additions in EPUB 3. By making these small programs part of the e-book environment, scripting, which is so much a part of the interactivity on the Web, can now add another dimension to the book. JavaScripts are small, and, when executed on a Web browser, they can do all sorts of things from animating elements, like images or type, to inserting calculators or even games. Matt Garrish is enthused by this addition. "It's going to be fun to watch the development of scripted ebooks. The static print mentality has largely ruled ebook development, so it's a bit like the dawn of a new age. It's impossible to predict the innovative ways people will find to use this functionality; creative

authors will, no doubt, find ways to improve on the traditional novel itself."

Recent changes in e-book hardware have produced the long sought after under-\$100 e-book reader, and now the multipurpose Kindle Fire—an e-book reader, tablet computer, and Internet portal all in one.

At the Frankfurt Book Fair, the Berlin-based Txtr company announced a new e-Ink reader. A stripped down e-Ink reader with replaceable batteries and no Wi-Fi, the "Beagle" is small, five inches, and light, 4.5 ounces. What makes this modest reader revolutionary is the spectacular pricing. Here in the U.S., the Beagle will be backed by 3M. It will be marketed to "the 80% of the cell phone market that aren't digital readers," says Thomas Leliveld, chief commercial officer for Txtr. That's actually a considerable market. A U.N. Telecom Agency Report last week claimed there are six billion cell-phone subscriptions worldwide. That's almost as many people as there are on the planet. Txtr will be asking mobile carriers to offer the Beagle to their subscribers for \$12.80. Finally, an e-book reader for less than the price of a new book.

These two changes, one subtle, relating to the way content is arranged, and one more obvious, an interesting gadget for next to nothing, might provide two more high-grade accelerants to an already rattling juggernaut. **SF**