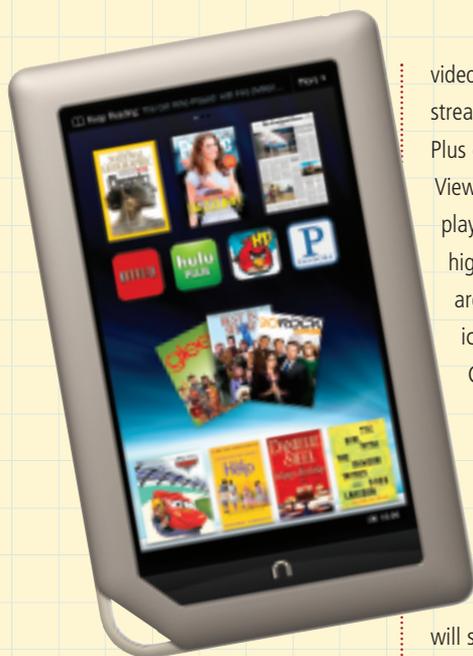# TOOLS of the TRADE

Nook Tablet

The updated version of the Nook Tablet moves the Barnes & Noble device further from a dedicated eReader and closer to a basic tablet computer. With several memory devices on board, you can carry a virtual library of books, magazines, newspapers, and comics. There's 16GB storage, an SD card slot, and free Nook Cloud storage. And you can read for 11.5 hours on a single charge. For music, there's a built-in player, and Rhapsody, MOG, Grooveshark, and Pandora come preloaded. E-mail and the Web are delivered over built-in Wi-Fi. HD videos and television can be streamed via Netflix and Hulu Plus on the seven-inch VividView touchscreen, which displays 16 million colors in high-res 1,024 × 600. There are thousands of apps specifically designed for the Nook Color and Tablet, including games, productivity, lifestyle, and education offerings. Preloaded are Sudoku, Crosswords, Chess, and Pandora. As an eReader, the Tablet will sync the last page with your smartphone and computer so you don't lose your place, you get expert recommendations from 40,000 booksellers, the tablet offers direct connections to friends with Facebook and Twitter to discuss your reading and ratings, and you can swap books with LendMe®. The Nook Tablet is 8.1" × 5" × .48" and weighs 14.1 ounces.
www.bn.com

Casio TRYX

Casio America, Inc.'s TRYX digital camera is actually listed in the 2012 edition of the *Guinness World Records* as the world's "most adjustable digital camera." The body of the camera tilts out from the frame to create a self-standing tripod, and the three-inch touch-screen LCD is swivel-mounted to tilt and rotate. The frame allows the camera to be hung from a hook, doorknob, or other surface, and the viewing screen rotates up to 270 degrees for viewing self-portraits—the frame rotates 360 degrees. These adjustments also enable a left- or right-handed grip. The overall size is 4.834" × 2.322" × 0.586", and it weighs 5.5 oz. Still (JPEG) and motion formats (MOV) offer a variety of modes: Snapshot (Auto/Premium Auto), Snapshot by Super resolution technology, Self-timer, BEST SHOT, Face Detection, Movie (FHD Movie, HD Movie), High Speed Movie (HS240) HDR, HDR-art, Motion Shutter, Slide Panorama, and Best Selection. The self-timed shots are controlled by a slide timer or a motion-detection auto-timer. Memory card compatibility includes SD, SDHC, and SDXC. The lens is an ultra-wide-angle 12.1 megapixel.
www.casio.com

Apple MacBook Pro

Apple's MacBook Pro can be found at the top of a number of "the best laptops of 2011" lists. Powered by a quad-core Intel core i7 processor, the 15" and 17" MacBooks run applications at up to twice the speed of their predecessors. The processor, cache, memory controller, and graphics engine are all on a single chip, and the architecture combines with TurboBoost 2.0 and Hyper-Threading to increase the speed of the active cores up to 3.6GHz. For graphics-intensive applications, MacBook Pro models feature high-performance AMD Radeon graphics processors that provide up to two times the performance of the previous generation. Beneath

One Day in August

By Michael Castelluccio, Editor

A glance back on 2011 certainly recalls a noisy panorama in the world of technology. There was quite an expansion of the digital universe. The skies are now crowded with cloudscapes from early leaders like Amazon down to Apple's recent iCloud, set aloft late in the year. They all continue to liberate computing and digital storage previously anchored to earthbound facilities.

Hacking provided the stuff of space operas in 2011, like the continuing saga of WikiLeaks vs. the world. During a particularly egregious State Department data dump, the combined financial forces of PayPal and several large banks threatened to choke off all supply lines for those funding WikiLeaks. Cue the mercenaries with the grinning plastic masks announcing, "We are Anonymous. We are Legion. We do not forgive. We do not forget. Expect us." And as Anonymous slammed and shut down servers belonging to the credit-card and payment forces, the world began to wonder about the might of this loosely organized band of hackers. What were they really capable of?

And, sadly, there was the passing of several pioneers during the course of this year. Dennis Ritchie, co-creator of the UNIX OS and the C programming language; John McCarthy, a pioneer in artificial intelligence; and, of course, Steve Jobs.

Then there was one day in August, an anniversary, that was particularly interesting. If you enter "August 12, 1981" into a search engine, one of the results will be a headline: IBM Unveils 5150 PC. It was one of those beige, boxy computers with a 5.25" floppy drive and a green-screen, command line monitor. But it was more than that, as many recalled the 30th anniversary of that piece of hardware. The date of its debut is considered by many to be the beginning of the PC era.

On the day back in 1981 that the IBM 5150 was announced, on the other side of the country, two other entrepreneurs were meeting at Apple headquarters—Steve Jobs and Bill Gates. Jobs wasn't overwhelmed by the IBM announcement. His company had the very successful

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the beautifully designed simplicity of the exteriors, these new models are thoroughbred workhorses. Also new is the Thunderbolt I/O connection that's up to 12 times faster than FireWire 800 and up to 20 times faster than USB 2.0. As more devices are designed for these connections, the Thunderbolt port will become even more valuable. The new FaceTime HD camera has three times the resolution of the previous camera, with improved low-light performance for video calls. The battery lasts up to seven hours, there's 802.11n wireless connectivity, Bluetooth 2.1, solid aluminum unibody design, large multi-touch track pad, six ports, and an SDXC card slot. www.apple.com

Belkin Mini Surge Protector

One of the most convenient devices to take on the road is the Belkin Mini Surge Protector with USB Charger to charge multiple devices from the same location, including those that connect via USB inputs. Along with providing surge protection for your laptop, phone, MP3 players, or tablet, the strip features three AC outlets and two powered USB outlets. The 360-degree rotating plug has four locking positions and provides complete surge protection through all the outlets. Note: The USB outlets can't be used as a USB hub and don't transmit data; they're intended only for charging devices that can be charged via a USB interface. The strip features a mini-USB cable to charge virtually any USB device, including BlackBerry and Motorola RAZR phones. The charger is lightweight and compact enough for your laptop bag, and the surge protector comes with lifetime product and $75,000 connected equipment warranties. www.belkin.com

Apple II, which was introduced four years before, and his development team was in the middle of creating the first Macintosh—a computer with icons and a mouse instead of a letter prompt. In fact, shortly after the IBM announcement, Jobs took out a full-page ad in *The Wall Street Journal* with a taunting headline, "Welcome, IBM. Seriously." Bill Gates said of the Apple team, "They didn't seem to care. It took them a year to realize what had happened." Gates, who later found his company firmly established in the middle of a very durable Wintel universe, had a clearer sense of what that rudimentary IBM personal computer would become.
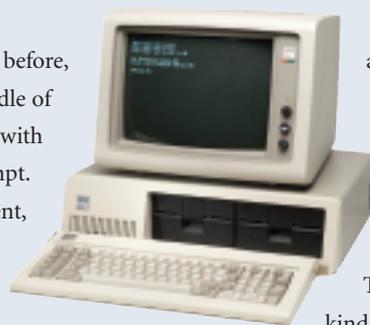
THE ERA ENDS—TWO TESTIMONIALS

As this year's anniversary rolled around, IBM was no longer producing PCs. The company sold that division to Lenovo back in 2005. Apple appeared on Wall Street's distinguished list of the most capitalized—not only ahead of IBM and Microsoft, but even, for a time, a notch above Exxon Mobil.

And then there was the blog posted by Mark Dean two days before the 30th anniversary of the beginning of the PC era. Mark Dean, chief technology officer of IBM in the Middle East and Africa, was one of the 12-person IBM engineering team that built the 5150 and launched the PC. In his guest blog posted on Smarter Planet on August 10, 2011, he as much as announced the end of the PC era.

"It's amazing to me," he reminisced, "to think that August 12th marks the 30th anniversary of the IBM Personal Computer. Little did we expect to create an industry that ultimately peaked at more than 300 million unit sales per year."

After expressing his gratitude for having the opportunity to work on that team, he then wrote, "It may be odd for me to say this, but I'm also proud IBM decided to leave the personal computer business in 2005. While many in the tech industry questioned IBM's decision to exit the business at the time, it's now clear that our company was in the vanguard of the post-PC era."

At this point, Dean turns to what the post-PC era actually looks like, and the man who helped usher in three decades of PC ubiquity explains that he, too, has moved beyond the PC. "My primary computer now is a tablet," he explains, adding, "When I helped design the PC, I didn't think I'd live long enough to witness its decline. But, while PCs will continue to be much-used devices, they're no longer at the leading edge of computing. They're going the way of the vacuum tube, typewriter, vinyl records, CRT, and incandescent light bulbs."

But it isn't just a shift in hardware type that's at the center of the new era. Dean says the focus of the new direction is not what's in your hands, but the role performed by whatever device you happen to be using. This new age of computing is about a different kind of human interface with the computer. In the past, what you saw on the screen (command line or icons) and how you manipulated those elements (via keyboard, mouse, or touch screen) are the elements that defined the human/computer interface. Mark Dean, in his blog, seems to be talking about a larger, almost metaphysical interface between humans and their computers—the social space between humans and computers. He writes: "PCs are being replaced at the center of computing not by another type of device—though there's plenty of excitement about smart phones and tablets—but by new ideas about the role that computing can play in progress. These days, it's becoming clear that innovation flourishes best not on devices but in the social spaces between them, where people and ideas meet and interact. It is there that computing can have the most powerful impact on the economy, society, and people's lives."

Another view of the disappearance of what we usually think of as the human/computer interface is noted in Walter Isaacson's biography of Steve Jobs. Michael Noer told a story on Forbes.com that moved the developer of the first successful tablet computer. Isaacson reports in his book: "Noer was reading a science fiction novel on his iPad while staying at a dairy farm in a rural area north of Bogotá, Columbia, when a poor six-year-old boy who cleaned the stables came up to him. Curious, Noer handed him the device. With no instructions, and never having seen a computer before, the boy started using it intuitively. He began swiping the screen, launching apps, playing a pinball game. 'Steve Jobs has designed a powerful computer that an illiterate six-year-old can use without instruction,' Noer wrote. 'If that isn't magical, I don't know what is.'"

Over the last 30 years, it appears two very important changes have occurred in the world of computing. Apple has succeeded in making the interface disappear, and IBM has turned its attention away from the hardware and toward the social dimension of human/computer activity. In the Post-PC era, six-year-olds have no need for manuals or training, and Jeopardy champion Watson, the IBM computer, can hold his own in a human conversation. **SF**