




Tabula Rasa

Why the new generation of tablet computers changes everything.

by **Steven Levy**
photographs by Dan Winters

Everyone who jammed into the Yerba Buena Center for the Arts in San Francisco on January 27, 2010, knew what they were there for: Apple CEO Steve Jobs' introduction of a thin, always-on tablet device that would let people browse the Web, read books, send email, watch movies, and play games. It was also no surprise that the 1.5-pound iPad resembled an iPhone, right down to the single black button nestled below the bright 10-inch screen. But about an hour into the presentation, Apple showed something unexpected—something that not many people even noticed. In addition to the lean-back sorts of activities one expects from a tablet (demonstrated by Jobs 

→ while relaxing in a comfy black armchair), there was a surprising pitch for the iPad as a lean-forward device, one that runs a revamped version of Apple's iWork productivity apps. In many ways, Jobs claimed, the iPad would be better than pricier laptops and desktops as a tool for high-end word processing and spreadsheets. If anyone missed the point, Apple's design guru Jonathan Ive gushed in a promotional video that the iPad wasn't just a cool new way to gobble up media—it was blazing a path to the **future of computing.**

Neil Young
CEO and cofounder, ngmoco

Cool and Connected

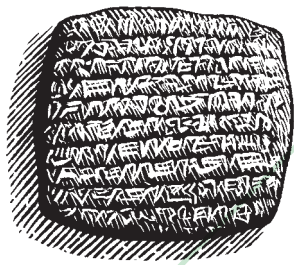
Is the tablet a new mobile computing device? Well, yes, it is, by default. But what is most interesting to me as a gamer is the impact that it can have in the least-mobile entertainment venue—the home. Aren't home games played on consoles? Yes. But for years, more and more players, especially teens, have been migrating to laptops and Flash gaming. The Web has become not just a viable venue for games but also one of the most vibrant. ¶ The iPhone 3GS is already far superior to the Nintendo DS or PSP and is approaching the performance level of the Wii. A tablet that is powerful enough to handle great games and portable enough to take anywhere—with an immediate library of tens of thousands of inexpensive or free experiences from the App Store—will be serious competition for laptops. ¶ Of course, the netbook was supposed to replace the laptop and be used by millions around the world. Forget the netbook. It's a slow, clunky piece of junk. Do I want to look like the guy who couldn't afford a real computer or the guy who went to the future and brought back a device that's as cool as I imagine I am? ¶ If the tablet is as appealing and useful as a laptop, with the power of a game console and an always-open library of apps, games, music, and entertainment, it will kill the laptop as a home games machine and kick the netbook out the window before it's had a chance to disappoint us with its inadequacy.

Even though the iPad looks like an iPhone built for the supersize inhabitants of Pandora, its ambitions are as much about shrinking our laptops as about stretching our smartphones. Yes, the iPad is designed for reading, gaming, and media consumption. But it also represents an ambitious rethinking of **how we use computers.** No more files and folders, physical keyboards and mice. Instead, the iPad offers a streamlined yet powerful intuitive experience that's psychically in tune with our mobile, attention-challenged, super-connected new century. Instant-on power. Lightning-fast multitouch response. Native applications downloaded from a single source that simplifies purchases, organizes updates, and ensures security. Apple has even developed a custom chip, the A4, that both powers the machine and helps extend its battery life to 10 hours.

The iPad's price puts it in the zone of high-end netbooks: \$500 for a basic 16-gig, Wi-Fi-only model. (A version with AT&T 3G connectivity will cost \$130 more, plus \$30 a month for unlimited data.) But **don't call it a netbook,** a category Jobs went out of his way to trash as a crummy compromise. The iPad is the first embodiment of an entirely new category, one that Jobs hopes will write the obituary for the computing paradigm that Apple itself helped develop. If Jobs has his way, before long we

Steven Johnson
Science writer

MODELS OF THE FORM



1900-1800 BCE
The wedge-shaped cuneiform on this Assyrian tablet is actually early legalese.

Kevin Kelly
Technology pioneer

Window on the World

Don't think of them as tablets. Think of them as windows that you carry. Two things distinguish them from always-on smartphones and lightweight laptops.

First, these are mobile screens, meant to move. They are aware of where they are in space and time. Hold a window up in front of you and you see an alternative view of the scene. Maybe you see annotated layers or a view from long ago. If someone is speaking to you through the window, move the screen and it will sweep across the caller's room. This portable portal will peer into anything visible. You'll be able to see into movies, pictures, rooms, Web pages, places, and books seamlessly. Many people think of this sheet as a full-color, hi-res, super ebook reader, but this viewer will be about moving images as much as

text. Not just watching video but making it. It will have a built-in camera and idiot-proof video-editing tools, and it will also serve as a portable movie screen, eventually enabled for 3-D. You'll "film" with the screen! It will remake both book publishing and Hollywood, because it creates a transmedia that conflates books and video. You get TV you read, books you watch, movies you touch.

And that is the second difference between this window and past devices: The tablet window goes two ways. You watch; it watches you. Its eye can remain on all the time, watching you as much as you like. Brian Eno once famously said (in the pages of *WIRED*) that the problem with computers was that there was not enough Africa in them. By this he meant that computers as we knew them could "see" only

the wiggling ends of our fingers as we typed. But if they could see and employ the rest of our body, as if we were dancing or singing, we could express ourselves with greater finesse. This window tablet injects some Africa into computers. It overthrows the tyranny of the keyboard. Gestures are king. Swoosh your fingers to scroll, wave your arms as with a Wii, shake or tilt it. Celebrate its embodiment. The craftsmanship of this device will matter. We'll spend hours holding it, caressing it, stroking its magic surface, watching it. The feel of its surface, the liquidity of its flickers, the presence or lack of its warmth, the quality of its build, the temperature of its glow will come to mean a great deal to all of us.

Because in this window we embrace the world, and it embraces us.

The End of an Era

Ten years from now, we will look back at the tablet and see it as an end point, not a beginning. The tablet may turn out to be the final stage of an extraordinary era of textual innovation, powered by 30 years of exponential increases in computation, connection, and portability.

When the Homebrew Computer Club started holding meetings in the mid-'70s, the reigning assumption among critics and futurists was that we were headed, inexorably, toward an image-based culture dominated by the visual language of television. The word—for so long the dominant medium for the transmission of information—was headed for the margins, subtitles underneath the hypnotic flicker of the Image Society.

But then something extraordinary hap-

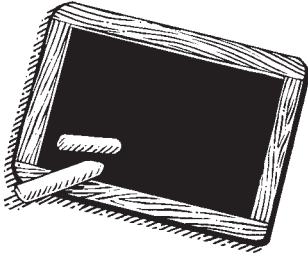
pened. The personal computer proved to be more than just a fancy calculator. It turned out to be a device for doing things with words. Each milestone in computation and connectivity unleashed a new wave of textual breakthroughs: Early networks gave rise to email and Usenet; the Mac UI made reading text on the screen tolerable; the Internet platform (and the NeXT development environment) made it possible for one man to invent a universal hypertext system; Google harnessed distributed computing to make the entire Web searchable in microseconds; and thanks to Wi-Fi and cellular networks, along with hardware miniaturization, we can now download a novel to an ebook in 10 seconds.

It has been an exhilarating ride, but it is coming to an end, and that magical experience of instantly pulling *Middlemarch* out of the ether and onto your Kindle suggests why: Compared to other kinds of information that computers process today, text has an exceptionally small footprint. With the arrival of the tablet, we have crossed a critical threshold: Where text is concerned, we effectively have infinite computational resources, connectivity, and portability. For decades, futurists have dreamed of the "universal book": a handheld reading device that would give you instant access to every book in the Library of Congress. In the tablet era, it's no longer technology holding us back from realizing that vision; it's the copyright holders.

Advances in technology will give us plenty of headroom with other kinds of data: streaming real-time video, conjuring virtual spaces, exploring real-world environments with geocoded data, modeling complex systems like weather. But in the tablet world, textual innovation will not come from faster chips or wireless networks. Incremental improvements will continue, to be sure, but there will be a steady decrease in radical new ways we interact with text.

If you time-traveled back to the Homebrew Computer Club in 1975, it would take you days to explain all the new possibilities for creating and sharing text. (Imagine explaining Wikipedia to someone who hasn't heard of the word processor.) But I suspect that the text-based interactions that coalesce around the tablet will still seem familiar to my grandchildren in 2030. Unless, of course, we've hit the singularity and the novels we're downloading have been written by the machines. But in that case, the rise of AI novelists will be the least of our worries.

The Digital Copilot



1700s
Erasable slates used by schoolkids put a premium on memorization

Will the tablet computer catch on? In one specialized realm, it already and decisively has: aerospace. Right now, the flying world is far ahead of the general public in embracing tablet devices. And while the motivations for widespread early adoption are specific to flying, they have enough parallels to normal terrestrial activity to suggest that tablets may find a place here on Earth.

The collective term for these devices is electronic flight bags. EFBs come in many forms, including some built into cockpits. But several popular versions resemble what Apple and others have announced: bigger than a PDA, smaller than a laptop, a flat working surface dominated by a display that accepts multiple kinds of touch inputs. EFBs are expensive—costing many hundreds to many thousands of dollars—but also very popular, for several reasons.

First, they address a genuine point of pain. Remember those squarish, footlocker-sized cases you used to see pilots wheeling through airports? They were jammed with the documents required for almost any flight—approach plates for landing

in bad weather, charts, runway diagrams, checklists, and operating handbooks. All that paper caused general chaos in the cockpit. To have it all in one trim package brings relief.

EFBs also let pilots simultaneously work with different kinds of data. The information a crew needs to see during flight consists of text (checklists, notices), static diagrams (airspace, airport layouts), and dynamic graphics (wind patterns at different altitudes). The EFBs present all this in one place—often as combined maps with text overlays, a view pilots can't get in any other way. And they're just as egalitarian about input. Pilots don't always have time to type, and depending on flight circumstances like turbulence or light, they might prefer touchscreens or knobs. Good EFBs accept different kinds of entries.

More important, in the cockpit constant updates save lives. Paper charts and briefings are out of date the second they're printed. Weather systems would have moved, airspace restrictions might have changed, and very often a plane's route would be adjusted. EFBs update constantly, usually via satellite networks.

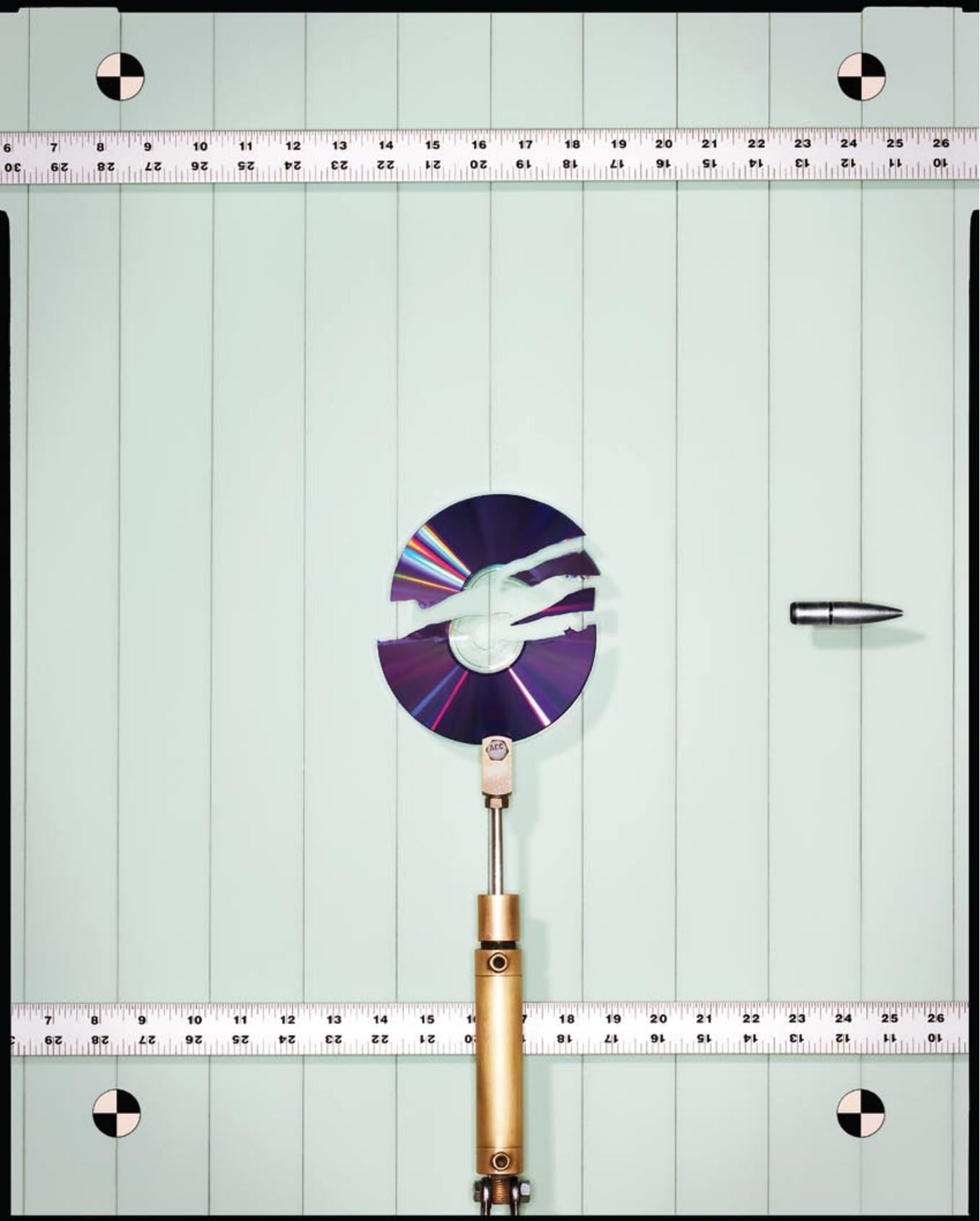
All these traits could easily find applications in the nonflying world. Engineers and architects might like to see a variety of data combined in one place as they stand outside a building site. People in a teleconferenced meeting might sketch a design on a touchscreen tablet and have it appear on their colleagues' devices around the world. Journalists at a congressional hearing might have live-feed windows showing what is being said in other rooms. And all of this information would be more useful on a device that's bigger than an iPhone but that doesn't require the awkward holding of an opened laptop.

There is one additional, crucial aspect of the EFB's popularity: People mainly use it while sitting in a chair. This points to the primary challenge for tablets: limiting them to situations when people can conveniently—and safely—stare at a screen. The main social menace of mobile devices today is that people look at their screens when they should be looking at the road or sidewalk. That's not a problem on airplanes. While pilots need to pay "strategic" attention to the flight—"Where is that thunderstorm headed?"—there's less second-by-second risk if they're checking their computer screen.

So we learn from jet pilots that tablets may indeed catch on—and they may well make all of our lives better. As long as we keep them out of the driver's seat, I'm ready for the tablet age.

➤➤ The fact is, the way we use computers is outmoded. The graphical user interface that's still part of our daily existence was forged in the 1960s and '70s, even before IBM got into the PC business. Most of the software we use today has its origins in the pre-Internet era, when storage was at a premium, machines ran thousands of times slower, and applications were sold in shrink-wrapped boxes for hundreds of dollars. With the iPad, Apple is making its play to become **the center of a post-PC era**. But to succeed, it will have to beat out the other familiar powerhouses that are working to define and dominate the future.

There's a lot to love about Apple's vision. As we start to establish the conventions made possible by advanced multitouch, we'll perform ever more complicated tasks by rolling, tapping, and drumming our fingers on screens, like pianists tickling the ivories. The iTunes App Store model gives us a safe and easy means to get powerful programs at low prices. Rigidly enforced standards of aesthetics will ensure that the iPad remains an easy-to-navigate no-clutter zone. And since we're obligated to link our credit cards to Apple, micropayments are built in, providing traditional media companies with at least a hope of avoiding the poorhouse. ➤➤



➤ But there's also a lot to worry about. It's a pain to lug around an external keyboard, which many people will require if they're serious about banging out documents. (My brief exposure to the iPad's onscreen keyboard wasn't encouraging.) Apple's system is closed in a way that the Mac (and even Windows) OS never was—all apps are cleared through Cupertino, and developers and publishers are a step removed from their users, who make transactions through the App Store.

Bob Stein

Codirector, Institute for the Future of the Book

Follow the Gamers

Twenty-five years ago, when I founded the Criterion Collection and Voyager, my imagination extended only as far as multimedia—enabling authors to express ideas with a palette that included audio, video, text, and graphics. While CD-ROMs hinted at these possibilities, the advent of the Internet, particularly the Web, showed that locating works in a dynamic digital network promised even more fundamental changes. The most important thing my colleagues and I learned from experiments with “networked books” is that as discourse moves from the page to the networked screen, the social aspects of reading and writing move to the fore. A book is becoming a “place” where people congregate and converse. ¶ The arrival of Apple, Android, and Nokia tablets ups the ante. Simply moving printed texts to tablets (as with the Kindle) will be of limited value. To succeed, publishers will have to embrace multimedia and community-building. My guess is that the gaming industry will show us the way. Unlike publishing, the culture of video-games is much less stifled by legacy products and thinking. Multimedia is already its language, and gamemakers have vast experience building thriving communities. As conventional publishers prayerfully port their print to tablets, my bet is that the gamemakers will invent the new forms of expression that will dominate the media landscape.

That Apple-centric vision assures a nasty fight ahead. In particular, the iPad represents a head-butt to another bold new model for computing: Google's Chrome OS.

In some ways, Chrome is even more radical than the iPad. Spawn of a pure Internet company, it is itself pure Internet. While Apple wants to move computing to a curated environment where everything adheres to a carefully honed interface, Google believes that the operating system should be nearly invisible. Good-bye to files, client apps, and onboard storage—Chrome OS channels users directly into the cloud, with the confidence that the Web will soon provide everything from native-quality applications to printer drivers. Google hopes that a wave of Chrome-powered netbooks set for release this fall will hasten that day, and its designers are already sketching out the next generation of Chrome OS devices, including touchscreen tablets.

Google vice president Sundar Pichai contends that having an iTunes-like app store is unnecessary, because desktop software is just about dead. “In the past 10 years, we've seen almost no new major native applications,” he says, ticking off the few exceptions: Skype, iTunes, Google Desktop, and the Firefox and Chrome browsers. “We are betting on the fact that all the user will need are advanced Web apps.” (Pichai acknowledges that the Web can't currently handle powerful games but says that

Nicholas Negroponte
Founder, One Laptop per Child; first investor in WIRED

The Next \$100 Laptop

The unsung advantage of current ebooks is being able to use them in bed. Paper books have pages that can neither disappear nor reappear. Instead, we have to turn them, which is pretty stupid and not at all easy when you're lying on your side.

So why tablets? A short answer: one-handedness.

And it's not just for bed. Would you have ever imagined how many people walk around looking at one hand? Texting is replacing talking, and thumbs are replacing lips. Laptops, meanwhile, are not mobile. They are nomadic. You have to sit down to use one and do battle for a connection. Standing with a laptop is entirely unsatisfactory.

Tablets are therefore the new frontier. They are the new book, the new newspaper, the new magazine, the new TV screen, and potentially the new laptop. Something you

carry—and, yes, something you can lose.

The real beneficiaries, however, are not you and me or the thousands who will soon queue up to buy the iPad. The undeniable beneficiaries of tablets will be those who have no alternative, those who have no books, no libraries, and in many cases no schools or electricity. I mean the nearly 2 billion kids in the developing world.

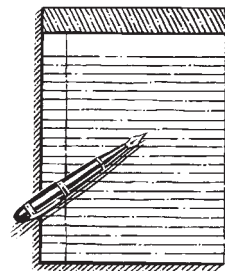
For them, a tablet needs to be windup. Yes, a crank, not solar but quiet human power that works at night, in cloud cover, and on windless days. Such a device also needs to be unbreakable, water-resistant, and dust-proof, and to connect to the Internet for free. At a minimum, it needs to hold 100 books and wirelessly access any of the titles stored on nearby tablets. So, if you ship 100 of these to a remote African village, each

loaded with 100 different books, that's 10,000 books in the village—more than you and I had in primary school.

I'm talking about the tablet version of the XO from One Laptop per Child, proposed for 2012. By that date, we will have moved from laptop to tablet for a variety of reasons, the biggest being cost. The \$100 laptop never actually hit \$100 (the closest we got was \$175), but we can get the price down, and the tablet is the way to do that. It requires no moving parts, not even a hinge. The housing can be made of a single piece of plastic. The XO today has 900 pieces, most on its circuit board. Ideally, the tablet's circuit board will be reduced to only one chip.

XO laptops are now in the hands of 1.4 million children in 35 countries and support 25 languages. The result: The kids teach their parents to read and write, truancy drops, and educators say they have never loved teaching so much.

Most of the students own their XOs and feel that it's the most important piece of hope in their life. And not surprisingly, most of the kids even sleep with them.



1888

A paper mill employee cut, ruled, and bound reject sheets to create the legal pad.

Martha Stewart
Magazine publisher and TV host

Into the Wild

I've been making magazines now for 20 years; I've been making books for 27 or 28. These are illustrated books and magazines that need a digital home somewhere. My printed cookbooks—the ones that have no illustrations—are available for the Kindle on Amazon.com. But the illustrated books need a full-blown effort like the iPad to really bring out the beauty of the images.

We all have so much to read these days, and having the ability to pick and choose and save and file and send digitally is really exciting. I have a bag full of torn-out magazine pages that I distribute to various people for creative ideas. I'll be able to do that much more effectively if I have access to a digital version of those magazines rather than having to destroy them.

We are at a crossroads here. The printing press is still in great use and is still a very viable tool. But the Internet is also an exciting place to learn, to read, to see. Either way, it's about customers. Where are those eyeballs? We have to find them.

That's one of the big credos at our company. Where our customer needs us and wants us, that's where we want to be—with our products, with our magazines, with our books, with our television content.

Ultimately, the tablet will not take the place, I hope, of the printed page in terms of the magazine format. I will continue to read print magazines, because I love them. That's me. But I will also read digital magazines. I will choose which ones. There are some magazines that I would look at just to see in more depth. *National Geographic*, God, I would love to see that. I already have the digitized version of *National Geographic*, but it's not the same thing. It's just like the magazine. The tablet could be like going into Africa.

Gina Bianchini
CEO, Ning

A smartphone is mobile, but it isn't fun to browse on. On a laptop, the technology is built in, but few want to carry around a 6-pound computer for the privilege of using a browser. The tablet bridges this gap. People will not only engage in new social experiences but will do so on a device that's easy (and beautiful) to use, wherever they may feel so inspired.

new technologies like Native Client and HTML5 will fix that problem.) ➡



➤➤ Though critics of Google worry about the company's power, Chrome OS is an open source system, and the Web apps Google encourages will, unlike Apple's, be available on any device or browser.

Apple won't talk on the record about Google's browser-centric approach, but Jobs did address the notion when I interviewed him about interfaces several years ago. "While we love the Web and we're going to have the best Web browser in the world, we do not want to make our UI look like a Web page," he said. "We think that's wrong." Clearly, he still thinks so. Apple favors the

pristine orderliness of autocracy to the messy freedom of an open system.

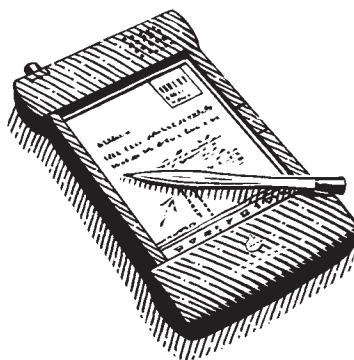
While Google and Apple are each positioning themselves as pioneers of the next paradigm, Microsoft—the company that dominates the current one—has a more iterative approach. It's taking an evolutionary path that integrates the seismic changes in the digital world into its flagship products, without any jarring leaps. Three years back, Microsoft introduced Surface, a technology that lets people use their fingers and objects to interact with table-sized displays. Later this year, the Xbox will implement a motion-tracking system called Project Natal. Chief strategy officer Craig Mundie, Redmond's delegated seer, says it's all part of a transition from the GUI— ➤➤

George Lois
Advertising pioneer

The Real Thing

Way back when I was a young man, making deliveries at my father's florist shop in the Bronx, I once had the unexpected choice of spending the evening taking a gander at some 1940s porno or accepting the invitation to have actual sex with a gorgeous lady I regularly delivered flowers to in ritzy Riverdale. With a pounding heart, I chose the real thing. That's how I feel about experiencing a magazine's contents on a crammed computer screen versus holding a magnificent magazine in my hands—with its surprising visual and visceral possibilities at the turn of each page.

The newfangled tablets that let me read electronic magazines could be a useful research device at times, but the tactile and graphic excitement that's available on the best graphically designed magazines are pitifully nonexistent on a bland, crowded computer screen. And certainly, the possibility of a great magazine cover that knocks your eye out on the newsstand—one with a big, edgy idea that makes a statement about America's politics and culture, that force-feeds an irresistible taste of a magazine's content—is totally out of the question. The magazine is dead. Long live the magazine.



1993
The Apple MessagePad—
and the Newton OS—almost
recognized handwriting.

Jack Dangermond
President and founder, ESRI

Planning a garden, park, building, or city shouldn't be done in an office. A location-aware tablet will let us use what's called geo-design to compose participatory, what-if scenarios onsite, using maps that several people can share—something we could always do with paper but that's been a challenge with digital maps in the field.

→ the graphical user interface that began with Mac and Windows—to the NUI—a natural user interface based on touch, gestures, and voice recognition.

Incremental change, however, can ultimately mean no change. A decade ago, Microsoft came up with its own vision of a tablet computer. But the company tried to have it both ways: a new category of device that ran an old style of software—specifically, a modified version of Windows. (Using Windows, computer pioneer Alan Kay says, was “a very bad idea for this kind of interaction.”) The Tablet

Marshall McLuhan
Prophet of the electronic age

The Medium Is Life

What would Marshall McLuhan (1911–1980) make of the coming tablet age? Contributing editor Gary Wolf channeled the oracular media theorist.

Steve Jobs is the preeminent figure of the late 20th century; he is our Ford, our Disney. Like them, Jobs is a great success in business. Others may have similar thoughts, similar predictions—in fact, if he were truly original he would not be so popular—but the fearlessness and simplicity of his attack on the old type of humanistic consciousness makes him a hero. ¶ Jobs operates in the infralogic of the digital age, where the separation between user and product is vanishing, along with the outdated conscious operations of prediction and control. ¶ Humanism temporarily survived the era of electronic media only through the act of turning on a device. The knob or switch is like the cover of a book: Open it; close it. But when a medium is coincident with life, the last refuge for humanism is gone. ¶ The iPad is the beginning of this end. The thin, single pane of glass that comprises the interface is just a window onto the world, an edgeless frame. Essentially, there is no interface, any more than a person’s fingertips are an interface. The long story of humanism—by which I mean the emergence of individual consciousness as a byproduct of our language and literature—comes to an end when we return, futuristically, to doing everything by hand. ¶ We no longer hear the voices of the past, because we have our fingers in our ears.

PC, introduced in 2002, was a flop. Meanwhile, advances from Microsoft’s labs can approach bar mitzvah age before finding their way into products. Surface is the most exciting product out of Redmond in years, but the company has been shockingly timid in pushing it into the marketplace. Almost three years after it was announced, Surface is still a novelty in a few hotel lobbies and retail stores. Apple all but announced that the iPad could damage its own desktop and laptop business, but Microsoft never seems to put all its weight behind groundbreaking products—especially if success may come at the expense of its Windows and Office cash cows.

Indeed, Microsoft seems locked into producing somewhat improved versions of those programs every few years. That means a decade from now, Microsoft’s answer to the challenges from Apple and Google will be ... yet another Windows upgrade. I ask Mundie whether we will

see a Windows 10. “Sure, from a brand point of view,” he says. Will it resemble the Windows we know and, um, love? “Who knows?”

One thing we do know is that a heated battle is breaking out over the grave site of the GUI. While unveiling the most heralded Apple product since the iPhone, Jobs presented a powerful and compelling vision of what comes next. Now he will have to fend off some tough rivals—and tough criticism—to make

Go Save Yourself

So once again we've changed the world with a mind-blowing, revolutionary product that does things that everybody considered impossible. An ebook reader that also plays movies and music? And browses the Web? No way. Can't be done. Well, we did it. And you can fly three times around the globe and watch movies the whole time on a single battery charge. It's amazing. Phenomenal. Exciting. Magical. Amazing. Beautiful. Stunning. Gorgeous. And yet for some people in the media, this is not enough. These people are disappointed because they expected the iPad to also save newspapers from a certain death.

Yes, David Carr of *The New York Times*, I'm talking to you, you pie-

eyed crackhead. All I can say is, bitch, please! I'm a genius, but I'm not a miracle worker. Nor am I Mother Teresa. I wasn't put on earth to save *The New York Times*. I was put on earth to restore a sense of childlike wonder to people's empty, pathetic lives, and I must say that so far I'm doing a pretty outstanding job.

Anyway, do you really think saving newspapers is just a matter of putting your old crap on a new device? Because from what I can see, *The New York Times* sucks just as bad on a Kindle as it does on paper. That, in fact, is the real problem with *The New York Times*: It sucks, and everyone knows it, except, apparently, the dumb fucks who write for *The New York Times*,

which is, oddly enough, the heart of the problem. *Quod erat demonstrandum*, as Socrates once said.

The iPad isn't about saving newspapers. It's about inventing new ways of telling stories, using a whole new language—one that we can't even imagine right now.

Like I said when I met the publisher of *The New York Times* when he begged me to let his new media guy get onstage at our iPad event: Sully, I like you guys, but the truth is you guys really need to die so that we can clear the way for the new guys—although at the same time I do want to commend you for the great job you did when you landed that plane on the Hudson. He's like, What? And I'm like, Wasn't that you? And he's like, No, that's a guy named Sullenberger, and I'm like, Well, what's your name? and he says, Sulzberger, and I'm like, OK, whatever, but you're still screwed.

Hacks, I'm sorry, but I'm not going to save you. Frankly, I don't read magazines or newspapers, and if every last one of you were all erased from the planet tomorrow I would not notice and I would not care. Having said that, I wish you all the best in whatever future careers you choose. Gardening, I've heard, is very peaceful and involves slinging manure, so you should be good at it. Namaste. Much love. Peace.

Chris Anderson
Editor in chief, WIRED

Ditch Your Laptop

Tablets are the future of media—if they become ubiquitous. And that will happen only if they replace laptops. I think most of us are willing to carry two devices (one is a phone) but not three. So why would they dump a keyboard for a touchscreen? Look to three data points for the answer: the iPhone, the Kindle, and the cloud.

The iPhone shows that loads of people want rich-media networked devices with them everywhere. Like a tablet, the iPhone is a one-app-at-a-time full-screen experience, where the interface is determined as much by the apps and the device itself as it is by the OS. By dint of its bigger screen, a tablet is immersive enough to spend hours with—and yet it's still intimate. A laptop is a work device, an arm's-length, lean-forward experience. A tablet, in contrast, is a personal device, something you cradle and lean back with.

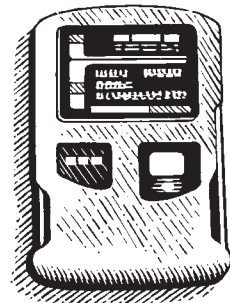
The Kindle shows that people are willing to pay for specialized devices

if they can give them the flexibility to have the content they want when they want it. For magazines, with their long-form text and engaging, visually rich design, a tablet could be perfect. Of course, it will still have a Web browser, but it'll also have a critical mass of content—games, books, magazines, and video—that isn't Web-based. All the impact (and more) of print, with the convenience of digital delivery. If it worked for the single-purpose Kindle, it will work even better for the multipurpose tablet. Imagine highly produced, curated content that arrives as an event to look forward to, like a film opening or a book launch. This is where the new business models kick in: Tablets can show media in a context worth paying for. The first issue of a magazine might even be free, like the first few levels of a game are, but that's just a sampler. Rather than tell people about great content, that tablet lets them

experience it—and easily upgrade to get more.

Finally, the cloud shows that as more and more of our data and software lives in servers somewhere, the computers we carry with us can be less and less powerful—thinner, lighter, longer battery life. Let Google buy the big iron; you can buy sexy aluminum and glass that's a delight to hold. Sure, rich-media apps like games and magazine readers will run locally, but they'll be no resource-hogging Photoshop. Modern smartphones have shown us what efficient mobile operating systems and specialized apps can do with hardware that wouldn't fill a single drive bay on a desktop PC.

Think of all the trips where you've asked yourself, "Is this when I leave the laptop behind and just use my phone?" The tablet answers that question. Bigger than a phone, funner than a laptop, more cuddly than a Kindle. I think they're going to sell like hotcakes.



1987
Star Trek introduced the PADD—Personal Access Display Device.