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THE PIXEL PROBLEM

GOOGLE'S LATEST CHROMEBOOK IS STUNNING, BUT THAT'S NOT ENOUGH.

ILLUSTRATION BY TAVIS COBURN

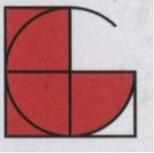
THE GOOGLE CAMPUS is as sprawling affair. It covers some 26 acres, densely foliated with a creek running through it. It's easy to get lost there—and this is true not just for people but for products. Google needs to turn its rambling suburbs into a high-rise. It needs to stack things up and get everything working flawlessly in one coherent ecosystem. And this is nowhere more evident than in its gadgets. Google is becoming an ambitious hardware player. Consider what it has to offer: Chromebooks, Glass, Nexus phones and tablets, self-driving cars! It wants to move its online success to your pocket, your desktop, your face. And it wants you to know that these things are not just, say, Android or Chrome devices made by somebody, somewhere. They are devices *by* Google, even if the company has to have someone else manufacture them. It's a subtle distinction but one that's clearly ever more important to Google, i The company's marketing for its Nexus line carries no branding other than its own—there is no mention of LG, Asus, or Samsung, the manufacturers who actually make the devices. For that matter, the Nexus line barely carries even the Android brand. Google's current ad for it does not mention Android at all. Not once. This is where it's going with Chromebooks too. While all the other models bear their manufacturers names, the Pixel is pure Google.

It is a remarkably well-engineered device, with built-in 4G, a stunning pixel-dense display (hence the name), and an Intel Core i5 processor sheathed in aluminum. It runs Google's cloud-based Chrome operating system, which updates itself constantly and is fast and gorgeous. This amazing piece of hardware is meant to make a case for the Chrome OS. It's the reference design that says Chrome can be a magnificent experience. But instead. Pixel reveals Chrome's flaws.

There is basically nothing the Pixel does that isn't matched by, say, the Lenovo ThinkPad XI Ultra-book, which, like the Pixel, has a touchscreen yet makes even more remarkable use of gestures thanks to Windows 8. Want to run Google's fleet of web apps? The ThinkPad can do that like a boss. It will play nice with your Android phone too. But it also does many things that neither a Pixel nor any other Chromebook can do.

This was highlighted just weeks after the Pixel shipped. Google Drive—where the company's suite of online office apps lives—went down just as the nation was arriving for work on a Monday. If you were relying on a Pixel to finish that report for the morning meeting, you were completely hosed (unless you had somehow foreseen the outage and stored an offline cache). And that downtime came just days after Google announced it was killing Google Reader. The web app for browsing RSS feeds was beloved by news junkies, but more to the point, it was an important bit of infrastructure that all manner of apps relied on to publish timely updates. Those hiccups don't happen with desktop apps. Microsoft or Apple may stop supporting a piece of software, but they aren't going to take it away from you.

An even bigger problem is that Google doesn't offer the advantage



of an integrated stack. Both Apple and Microsoft have made compelling cases for integrating services across phones, tablets, and computers. Each designed its mobile devices from the ground up to run with the desktop. Consider things like Apple's Photo Stream, which can push pictures automatically from your phone to your Mac, or Microsoft's ability to keep all your data, settings, and photos synced across devices via SkyDrive—change a profile setting on your Windows Phone and it shows up on your Windows desktop. (These features are cloud-data driven—a place where Google should shine.)

There's no similar advantage to using an Android phone with a Pixel over using it with a MacBook Air. Google Drive works similarly on any laptop, largely because Google is focused on syncing data, whereas its competitors are focused on syncing experiences. Increasingly, we buy a device because it's going to work with our other devices and existing apps. We don't want just the gadget itself; we want the ecosystem it inhabits. And Google's ecosystem is fractured.

Google has product lines on three platforms: web, mobile, and desktop. If you're heavily invested in its web apps, Android makes a lot of sense. Its integration with your Google account helps it do amazing things. Google Now, for example, combines your location with the wealth of data the company knows about you to, say, automatically pop up your boarding pass at the airport. Or display directions to your hotel when you land. It would be creepy were it not so helpful. (OK, maybe it is a little creepy.)

Google needs to make that same impression with Chrome. Instead, there's a divide between its desktop efforts and other aspects of the business. Two different operating

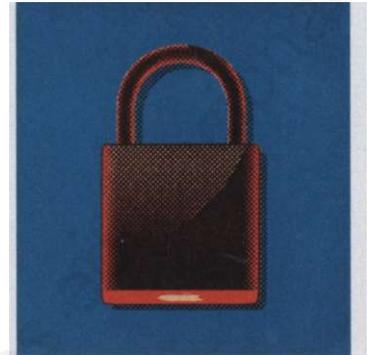
systems, two different experiences.

There are all sorts of signals that the company is about to remedy this. As far back as 2009, Google cofounder Sergey Brin predicted the two operating systems would merge. This looks to finally be happening. Andy Rubin—the man behind Android—was recently reassigned. In his place Google put Sundar Pichai, who has been running the Chrome program.

If Google does merge operating systems (and it will). Chrome starts making more sense as an ecosystem. The most apparent reason is apps. The Chrome Web Store is at best OK. Combining Android and Chrome instantly gives the Pixel and Google's desktop hundreds of thousands of apps. But the company would make an even stronger case if it also used what it knows about you to import its mobile experience to the desktop.

In 2012 Google began rolling up its web services in earnest. It unified its cookies so it could better track you from place to place, service to service. That universal Google account login is the company's biggest strength. It's been watching you, and now it can wrap up all that knowledge in a tight package. It's tracking where you go, what you like, what you write, what you search. It can witness your changing tastes and thoughts over time. That's what drives stuff like Google Now and helps it answer questions for you instead of merely providing search results.

This is Google becoming one grand unified product—the thing that organizes all your information, no matter where you are or what you are doing. But Chrome, as the Pixel has so damagingly revealed, is still little more than a glorified web browser. It has to think bigger. It has to show a clear advantage to using Google everywhere—on mobile, on the web, and on the desktop. Only then will it really complete the ecosystem,



POWER USER

KID-PROOF YOUR iPad

You've seen the videos on YouTube. A cute little kid is touching and swiping away on an iPad. It's adora—great Caesar's ghost! Is that kid on 4chan?! When you give your child access to your iPad, you're giving them access to everything it has to offer. If you don't want your 6-year-old going on an in-app purchasing spree or seeing something they'll never be able to unsee, a few tweaks to the Restrictions and Accessibility settings will keep them on task—and keep you from having to explain why those ladies aren't wearing clothes. 1 To control access to things like Safari, the camera, and the ability to install or delete apps, go to Settings > General > Restrictions and enter a passcode. You can also disable in-app purchases and limit the iTunes content they can download to particular ratings. 1 For a more restricted, single-app experience, go to Settings > General > Accessibility > Guided Access and switch on Guided Access with a four-digit code. Next, open the app your child will be using (Stack the States, Paint My Wings, and JellyCar 2 are worth checking out). Triple-click the Home button to bring up the app's Guided Access settings, where you can disable the Home button, locking them into that one activity, or restrict portions of the screen where buttons or search bars are located. 1 When using either setting, you just reenter your passcode to return the iPad to normal mode. Innocence of youth preserved. —CHRISTINA BONNINGTON

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