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Android OS

Android is a Linux-based operating system designed primarily for touchscreen mobile devices such as smartphones and tablet computers. Initially developed by Android, Inc., which Google backed financially and later purchased in 2005, Android was unveiled in 2007 along with the founding of the Open Handset Alliance: a consortium of hardware, software, and telecommunication companies devoted to advancing open standards for mobile devices. The first Android-powered phone was sold in October 2008.

Android is an open source and Google releases the code under the Apache License. This open source code and permissive licensing allow the software to be freely modified and distributed by device manufacturers, wireless carriers and enthusiast developers. Additionally, Android has a large community of developers writing applications ("apps") that extend the functionality of devices, written primarily in a customized version of Java programming language. In October 2012, there were approximately 700,000 apps available for Android, and the estimated number of applications downloaded from Google Play, Android's primary app store, was 25 billion. Google likes to downplay the Android "fragmentation" issue in which mobile device manufacturers are releasing new products for the multiple concurrent versions of the Android OS. It's a major issue for software developers who have to support all these versions, and it's time that Google acknowledged it. In a recent study, Baird Research found that developers were especially concerned with Android fragmentation. In fact, 24 percent of respondents said it was a "huge problem," while 33 percent of developers said it was a "meaningful problem." Only 14 percent of respondents said it was not a problem at all.

As Android owners know all too well, getting update to their smartphone is a pain. Users of a particular Android device may have to wait for their turn to get the software, while their friend with a different device might already be running the latest version of the operating system. When Apple releases update to its operating system, it is available to all customers that day. Granted, Apple's process is simpler, since it does not need to worry about multiple device manufacturers and the modifications those companies might be making to the operating system. But for Apple customers, it is a much easier process.

The time has come for Google to work with vendor partners to streamline the update process. The operating system's success has made it a target for patent litigation as part of the so-called "smartphone wars" between technology companies.